Multi Protocol NIC for DDP70/92 and EMP 156 Installation Instructions

© 2007 Ricoh Corporation
5 Dedrick Place
West Caldwell, NJ 07006
January 2007
N336649B

© 2007 Ricoh Corporation. All rights reserved.

No part of this document may be reproduced without the expressed permission of Ricoh Corporation.

The material in this document is for informational purposes and is subject to change without notice. Ricoh Corporation assumes no responsibility for errors or omissions in this document. No liability is assumed for any damages resulting from the use of the information it contains.

TRADEMARK

Adobe and Postscript are registered trademarks of Adobe Systems Incorporated. PCL is the trademark of Hewlett Packard. Ethernet is a trademark of Xerox Corporation. Windows XP is a trademark of Microsoft Corporation. Digital Document Publisher and DDP and its associated logo mark are the trademarks of Ricoh Corporation. Ricoh and the Ricoh trademark are registered trademarks of Ricoh, Ltd. All rights reserved.

All other terms and product names may be trademarks or registered trademarks of their respective owners and are hereby acknowledged.

NOTICE TO USER

In an effort to meet the demands of a rapidly changing technology, the manufacturer is continually developing new features and functions to meet changing printing or printer needs. Please be sure to consult all manual updates or addenda when using this product's documentation.

This document contains TrueType fonts from Monotype Imaging Inc. Reproduction of these fonts is prohibited.

The software embedded in this product is based in part on the work of Independent JPEG Group.

The software embedded in this product uses software by CMU. Copyright 1988, 1989 by Carnegie Mellon University. All rights reserved.

Permission to use, copy, modify, distribute and sell this software and its documentation for any purpose and without fee is hereby granted, provided that the avove copyright notice appears in all copies and that both the copyright notice and permission notice appear in supporting documentation, and the name of CMU not be used in advertising or publicity pertaining to distribution of the software without specific written prior permission.

The software embedded in this product uses the software by Sam Leffler and Silicon Graphics.

Copyright (c) 1988-1997 Sam Leffler

Revisions

Revision	Page No. (Contents)	Date
A	Original Release	October 2005
B	Generic Release - adds title page and copyright page	January 2007

1.Overview

Installation Requirements

The contents of the NIC kit are listed in the table below.

No	Item	Printer	
		Quantity in DDP70/92	Quantity in EMP156
1	Network Board Ass'y	1	1
2	Dust Cover/Modular Type	1	1
3	Dust Cover/D Sub Type	1	1
4	GND Plate(LBM)	1	-(Note)
5	Ferrite Core	1	-(Note)
6	Inch Screw/4-40 TYPE	2	2
7	M2.5x8 Pan Head Screw	4	4

Note: The GND Plate(LBM) and the ferrite core are used for only DDP70/92.

Working time

Approx.80 min.(DDP70/92 and EMP156 commonness)

Necessary tools

(1)Screwdriver, size #1 and #2.

(2)Ratchet Screwdriver, size #1.

Caution !
When installing the Network Board Ass'y, various printer setting values(indicated in table1 for DDP70/92 ,table2 for EMP156)are reset to the factory default value ,and VPT added by user is deleted. If necessary, please contact to the customer about reset of various printer setting values before the installation of the Network Board Ass'y .

Installation Procedure

This installation instruction is used for both DDP70/92 and EMP156.

- For DDP70/92

  page 2 to page 26

- For EM156

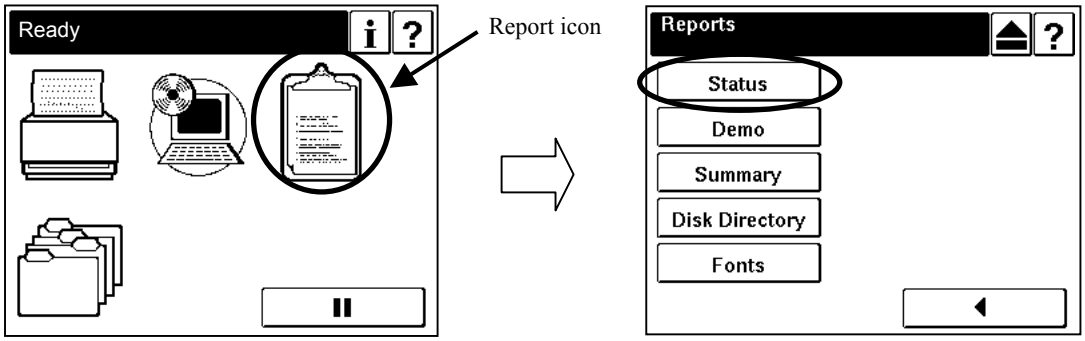
  page 27 to page 55

2.Installing for the DDP70/92

Print the Status Page

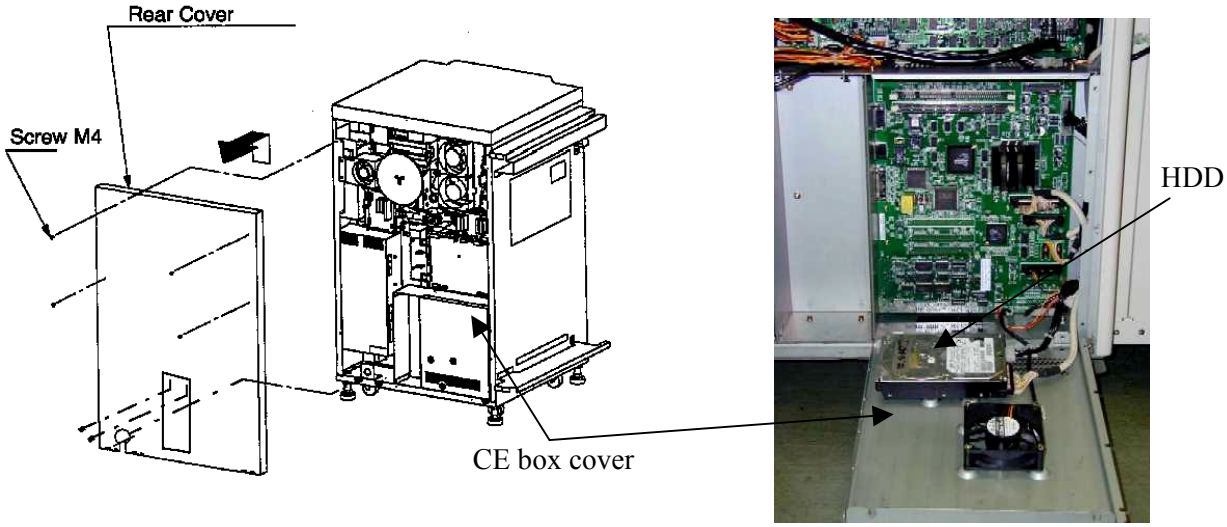
Please print the Status Page in order to confirm the printer works normally before installing Network Board Ass'y.

1.Power on the printer and after displayed the Main Menu, touch the Report icon. And touch "Status" button. Then the Status Page is printed.



Accessing the Controller Assembly

1. Make sure you have shut down the printer and unplugged the power cable from the plug.
2. Take off the rear cover of the printer by removing the six screws that secure the rear cover to the printer. Unhook the bottom of the rear cover, then lift up and pull forward to release it.



3. Remove the twelve screws that secure the CE box cover.

> ***CAUTION!***
> *The HDD is attached to the CE box cover and has a cable connection. Take precautions to not damage the HDD cable when removing the CE box cover from the printer.*

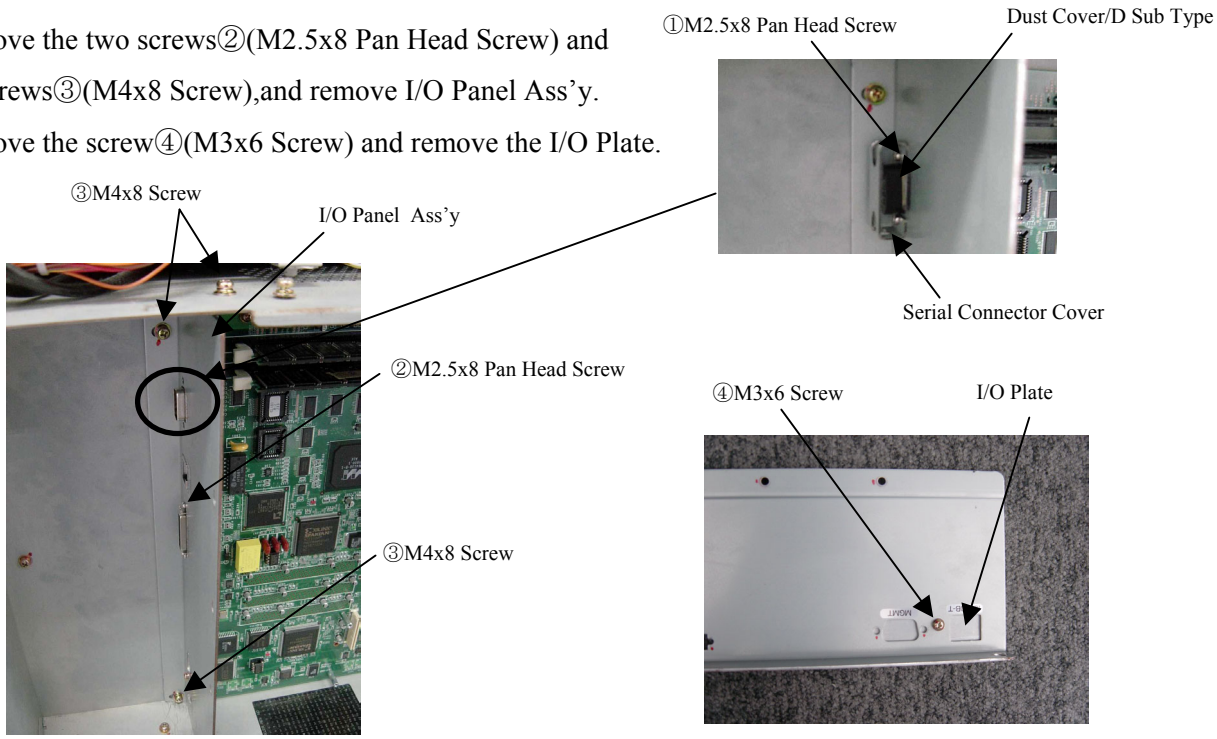
4. Unplug the HDD cable from controller board connector J6.
5. Unplug the FAN cable from controller board connector J21.
6. Unplug the HDD power cable from the HDD.

Removing the I/O Panel Ass'y

1.Remove the two screws①(M2.5x8 Pan Head Screw), and remove the Dust Cover/D Sub Type and Serial Connector Cover.

2.Remove the two screws②(M2.5x8 Pan Head Screw) and the screws③(M4x8 Screw),and remove I/O Panel Ass'y.

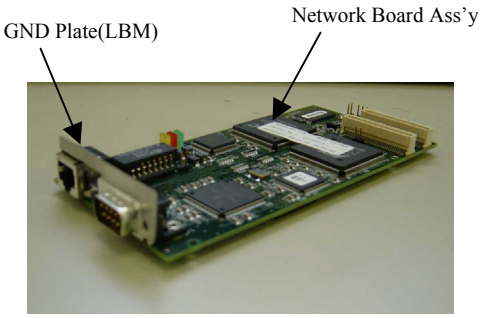
3.Remove the screw④(M3x6 Screw) and remove the I/O Plate.

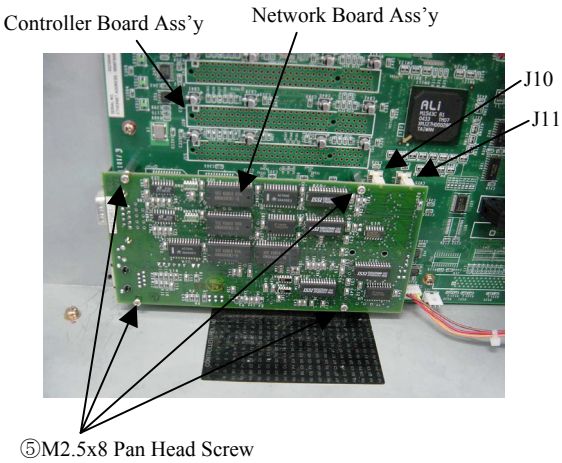


Installing the Network Board Ass'y

1.Attach the GND Plate(LBM)(Installation Requirements No.4) to the Network Board Ass'y. (Installation Requirements No.1).

2.Set the Network Board Ass'y on J10 and J11 of the Controller Board Ass'y, and fix the Network Board Ass'y with the four screws⑤(M2.5x8 Pan Head Screw/ Installation Requirements No.7)





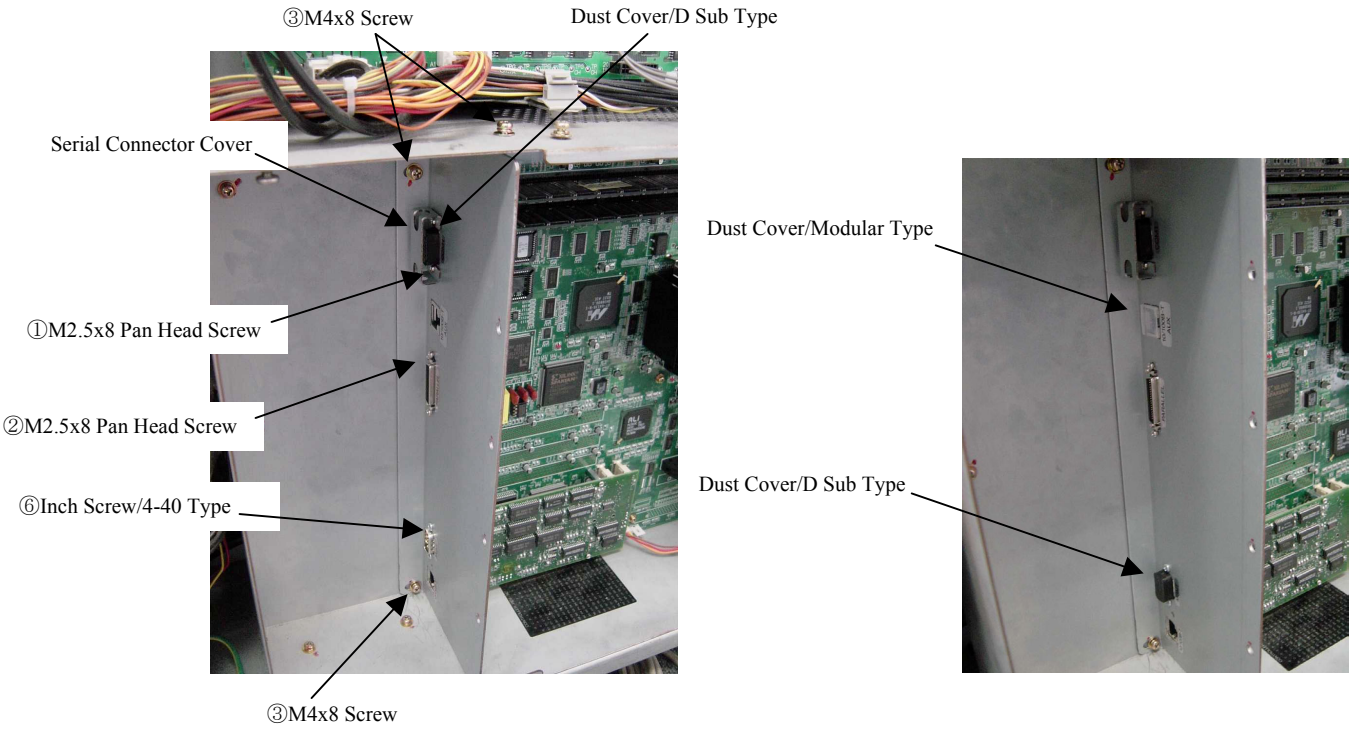
Installing the I/O Panel Ass'y

1.Install the I/O Panel Ass'y with the two screws②(M2.5x8 Pan Head Screw), the two screws⑥ (Inch Screws/4-40 Type/Installation Requirements No.6) and the three screws③(M4x8 Screw)

2. Attach the Dust Cover/D Sub Type to the COM1 of Controller Board Ass'y, then install the Serial Connector Cover with the two screws②(M2.5x8 Pan Head Screw).

3.Attach the Dust Cover/D Sub Type(Installation Requirements No.3) to the MGMT of the Network Board Ass'y, and attach the Dust Cover/Modular Type(Installation Requirements No.2) to the 10/100B-T AUX of the Controller Board Ass'y.

CAUTION!
When installing the Network Board Ass'y, the 10/100B-T AUX network port(attached the Dust Cover/Modular Type) of the Controller Board Ass'y does not work.



Installing the CE box cover and the rear cover

1.Install the CE box cover with the twelve screws(Plug the HDD cable, FAN cable ,HDD power cable).

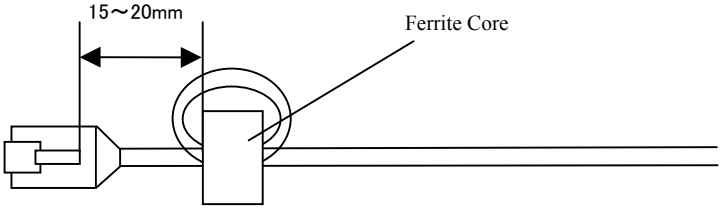
2.Install the rear cover of the printer with the six screws.

Note: Refer to the "Accessing the Controller Assembly"

Installing the Ferrite Core

1. Twist the one end of the Ethernet cable on the Ferrite Core(Installation Requirements No.5) as follows.

2. Connect the end (attached the Ferrite Core) of the Ethernet cable in the network environment to the 10/100B-T connector on the Network Board Ass'y.



3.Plug the power cable of the printer.

Confirmation of Connection

1. Power on the printer, and touch “Information” button after “Ready” is displayed on the OCP.

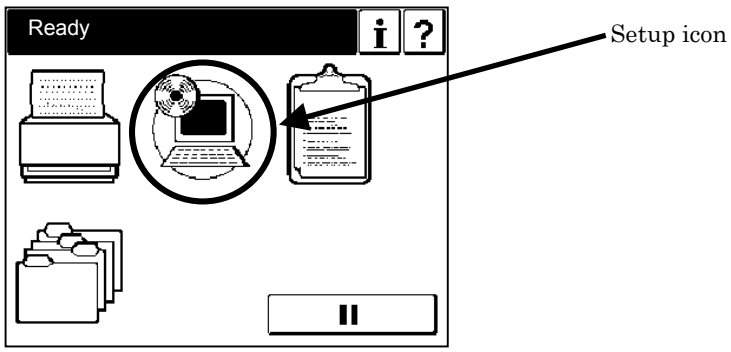
> ***CAUTION!***
> *When turning on the printer , confirm the power supply of the network equipment (user environment) connected with the network cable is turned on. It becomes the network loading error, and the following work cannot be executed.*

2. Touch “Network” button, and confirm that “10/100B-T AUX” and “10/100B-T NIC” buttons are displayed on the OCP. If these two network interfaces are displayed, the printer recognizes the Network Board Ass’y normally.
   If the two network interfaces are not displayed but MAC address, IP address, and other network parameters are displayed, the printer does not recognize the Network Board Ass’y. There is a possibility of the loose connection when the Network Board Ass’y is installed. Check out the attachment procedure and then repeat the above-mentioned steps.

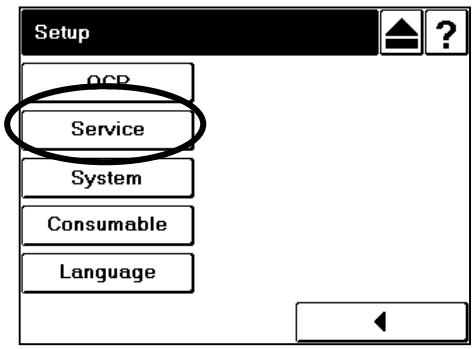
Upgrading of the Network Board Ass’y Software

Perform the upgrading of the print server software according to the procedure shown below.

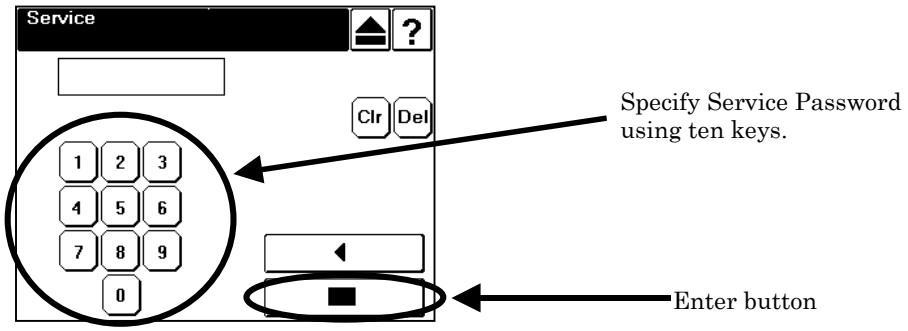
1.Touch the Setup icon on Main Menu.



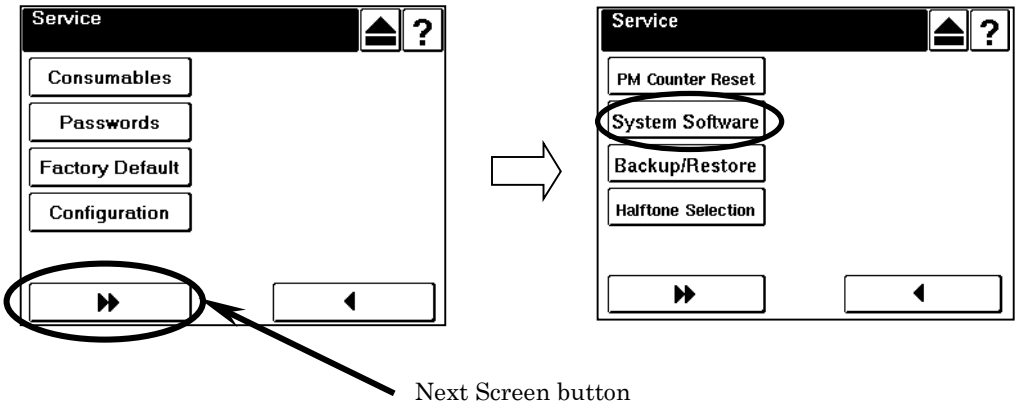
2.Touch “Service” button.



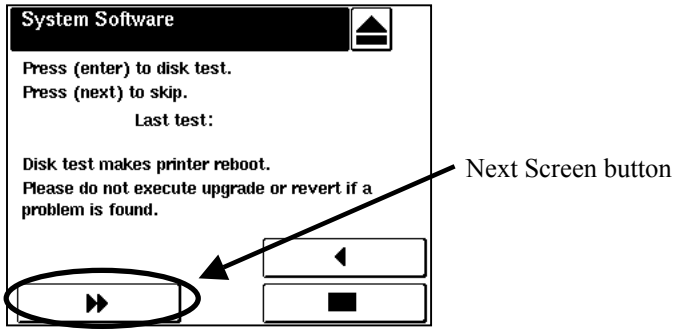
3.The input screen of “Service Password” is displayed. Press the Enter button to enter “Service” menu without inputting the service password(factory-set default). When the Service Password is changed, type the new value and press the Enter button.



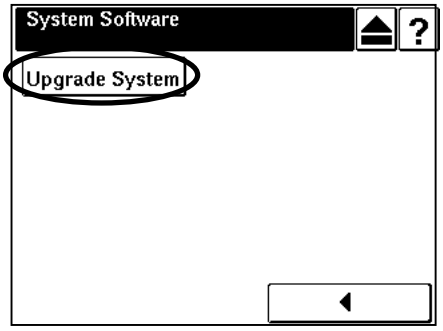
4. Touch the Next Screen button once to display the next screen, and touch "System Software” button.



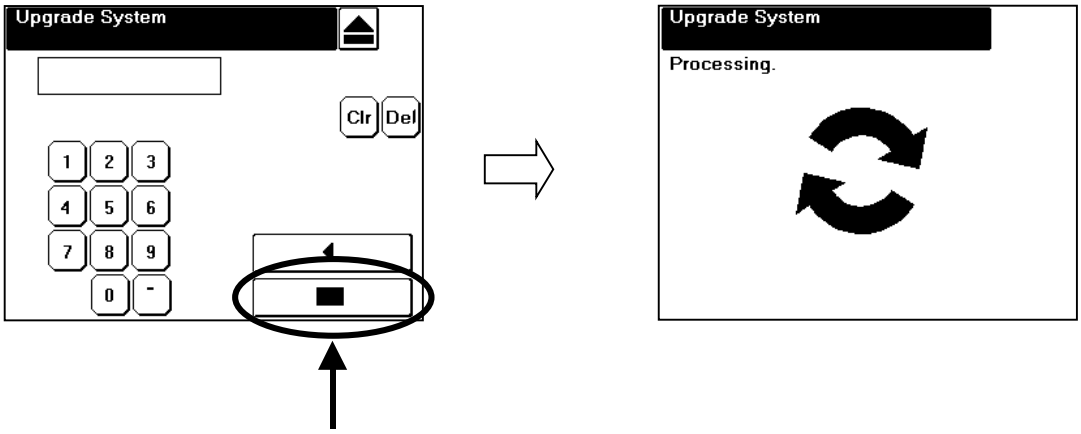
5. Touch the Next Screen button once to display the next screen.


System Software
Press (enter) to disk test.
Press (next) to skip.
Last test:
Disk test makes printer reboot.
Please do not execute upgrade or revert if a problem is found.
Next Screen button

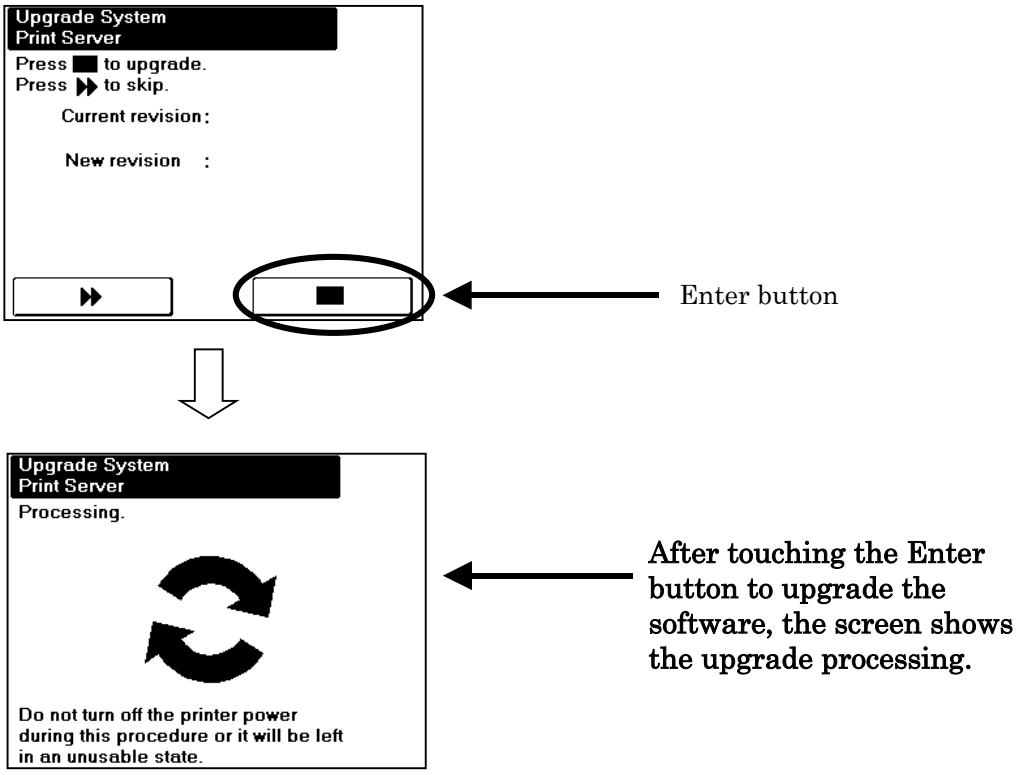
6. Touch “Upgrade System” button.



7. Touch the Enter button without inputting any Keycode because it is already set.
   The printer starts processing to prepare the upgrading. (It takes about 3 - 4 minutes.)

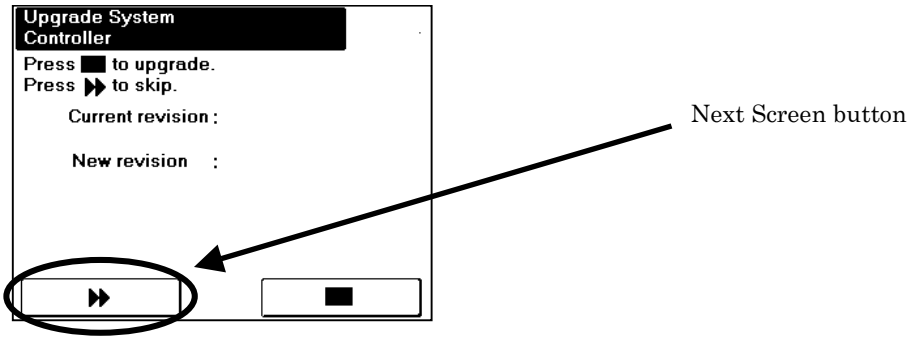


8. After the completion of upgrade preparation, the New Print Server Software Version is displayed on "New version" of the Print Server Upgrade screen. Touch the Enter button to upgrade the Print Server software.

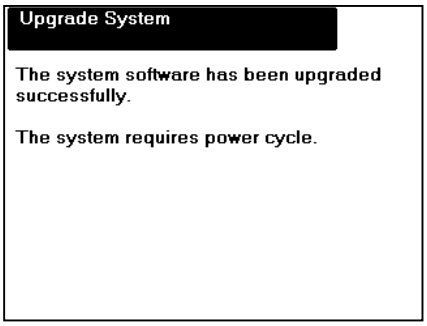

Upgrade System
Print Server
Press ■ to upgrade.
Press ▶▶ to skip.
Current revision :
New revision :
Enter button
Upgrade System
Print Server
Processing.
Do not turn off the printer power during this procedure or it will be left in an unusable state.
After touching the Enter button to upgrade the software, the screen shows the upgrade processing.

Note:The upgrading time of the Print Server Software will take 2 minutes.

9. After finishing the Print Server upgrading, other upgrade screens (Controller, OCP Logo, and OCP) are displayed. <u>You have to skip them by touching the Next Screen button.</u>



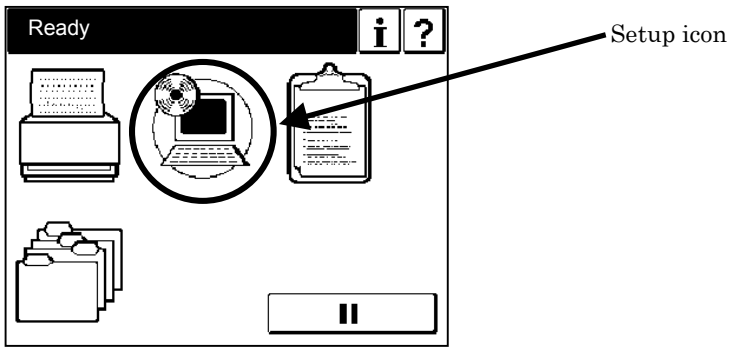
10. The following screen is displayed after skipping all other upgrade screens except the Print Server.
Turn off and on the printer to restart with the upgraded software.



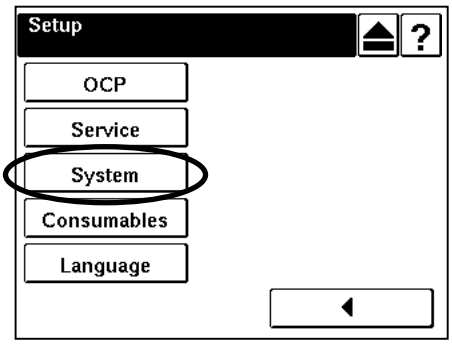
The software (Print Server) upgrade of the Network board Ass'y is completion now.

Set IP Address of the Network Board Ass'y

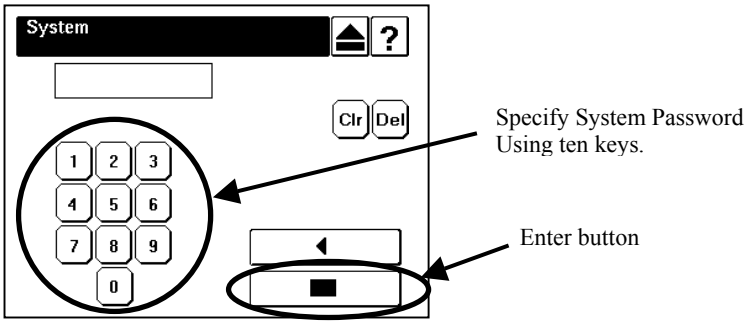
1.Touch the Setup icon on Main Menu.



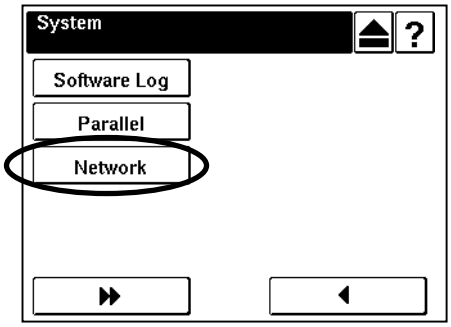
2. Touch "System" button.



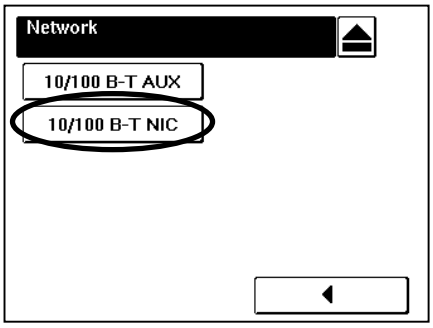
3. The input screen of “System Password” is displayed. Press the Enter button to enter “System” menu without inputting the system password(factory-set default). When the System Password is changed, type the new value and press the Enter button.



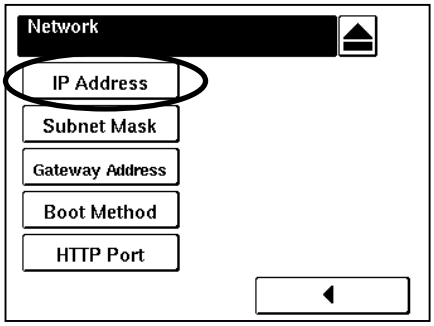
4. Touch “Network” button.



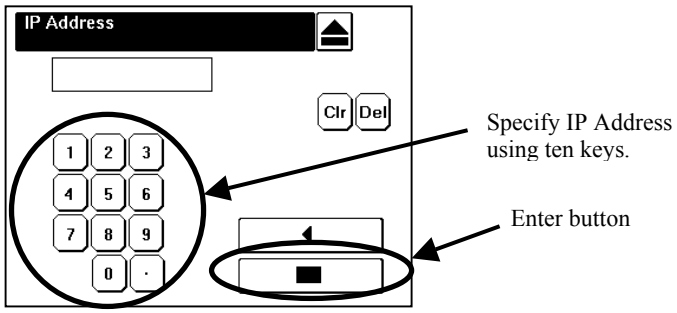
5. Touch “10/100B-T NIC” button.



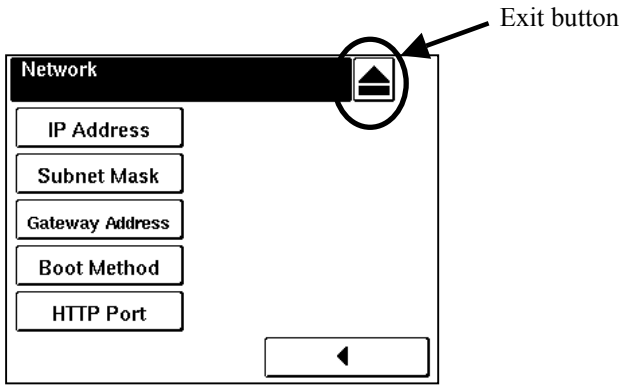
6. Touch “IP Address” button.



7. The input screen of “IP Address” is displayed. Press the IP Address(as user’s environment) using ten keys, then touch the Enter button.



8. Touch the Exit button.

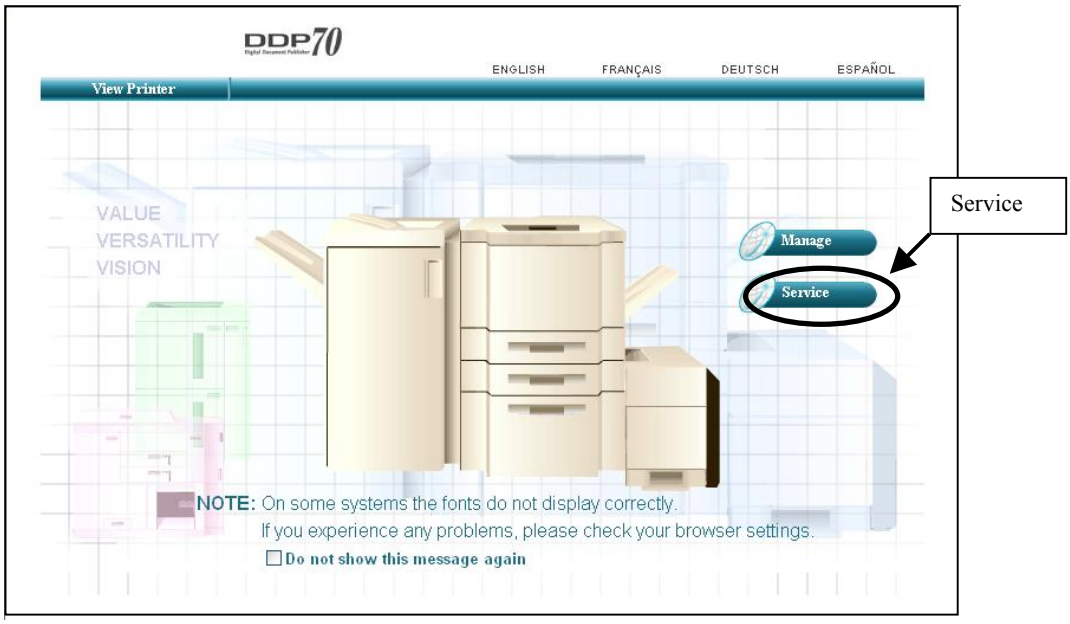


Reset to Factory Default of the Controller configuration and the Network Board Ass'y

CAUTION!
When Factory Default is executed, please note that the following matter is generated.
(1) Various printer setting values(indicated in table1) changed by user are reset to the factory default value.
(2) VPT added by user is deleted..

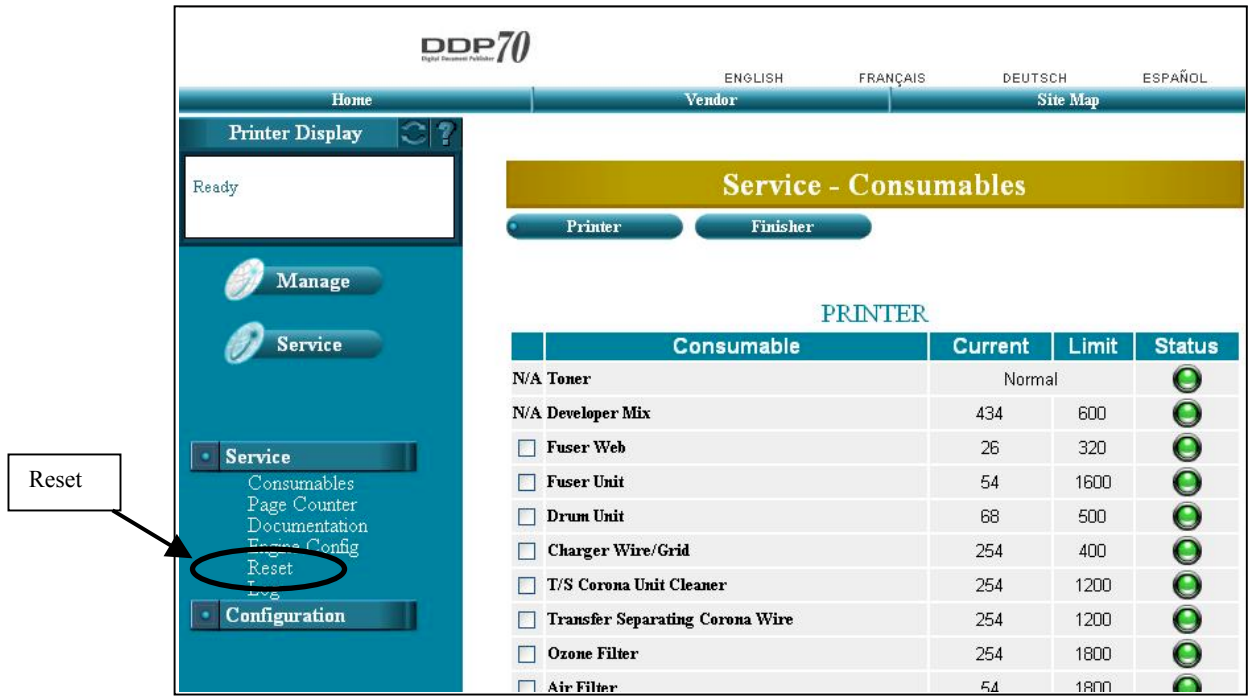
1.Start the Internet Explorer from PC and enter the IP Address that set upper section.

2.Click the "Service".

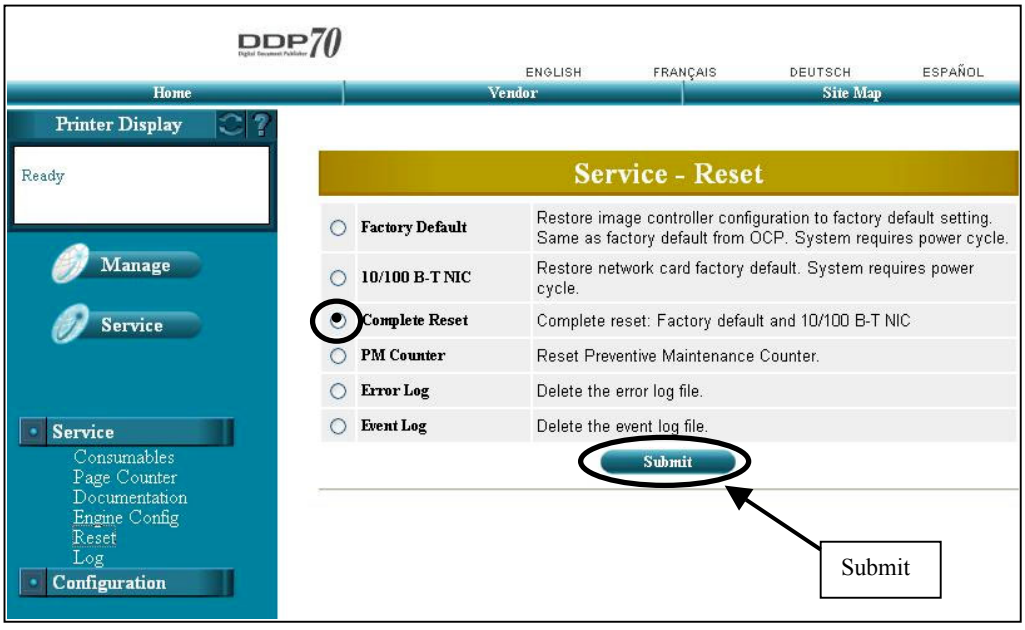


3.After displaying the page of the Enter Network Password, enter "service" in User Name and click "OK" button without entering the Password (factory-set default). When the Service Password is changed, enter the new value and click "OK" button.

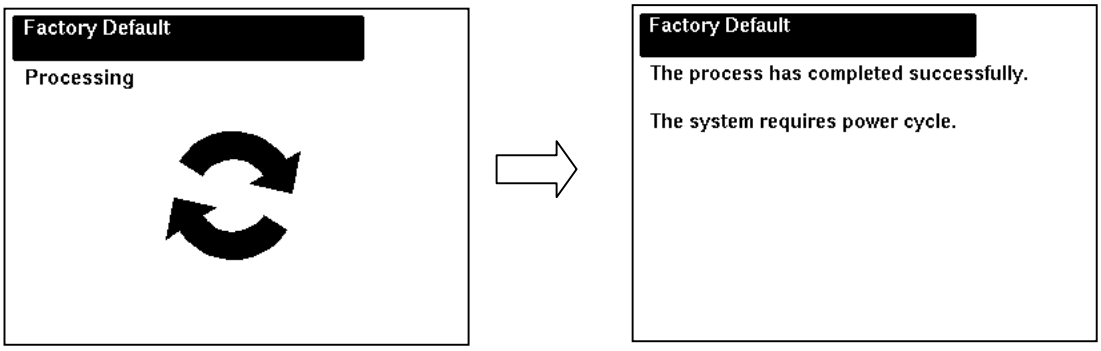
4.Click the “Reset”.



5.Check the “Complete Reset” and click the “Submit”.



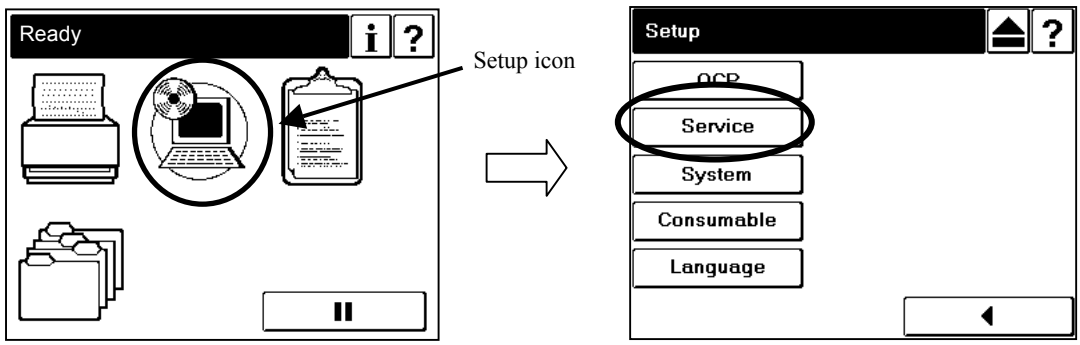
6. After the above-mentioned operation is executed, the following screens are displayed in OCP of the printer. Then execute power cycle the printer.



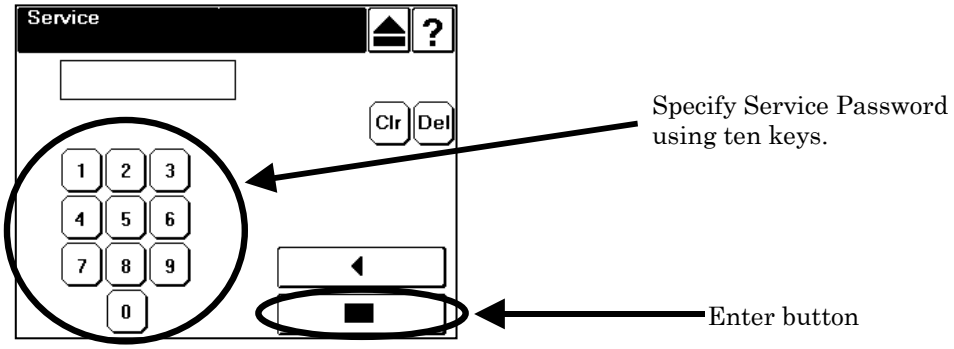
Note:The Factory Default time will take less than 1 minutes

Backup All

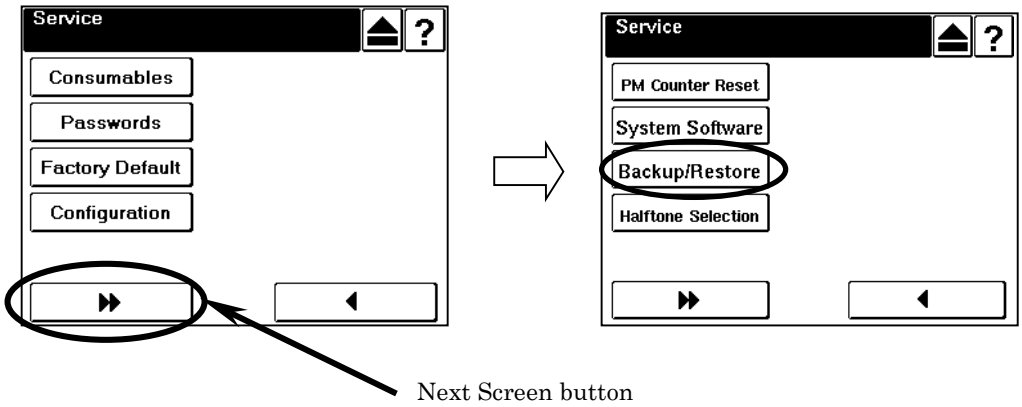
1. Power on the printer.
2. Touch the Setup icon on Main Menu, and touch "Service" button.



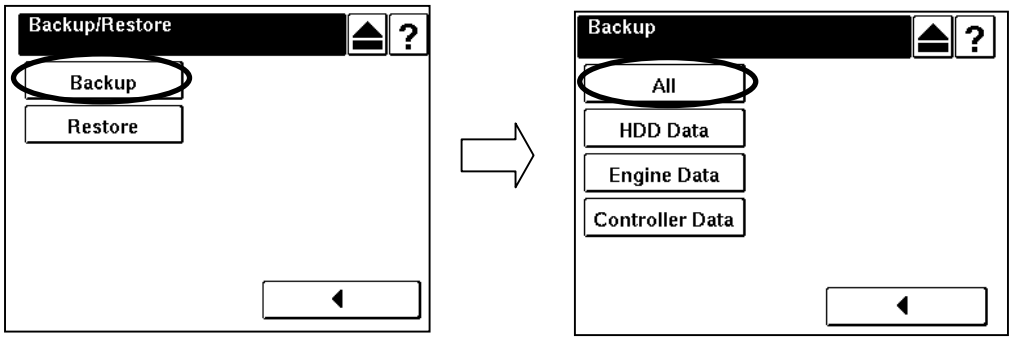
3.The input screen of "Service Password" is displayed. Press the Enter button to enter "Service" menu without inputting the service password(factory-set default). When the Service Password is changed, type the new value and press the Enter button.



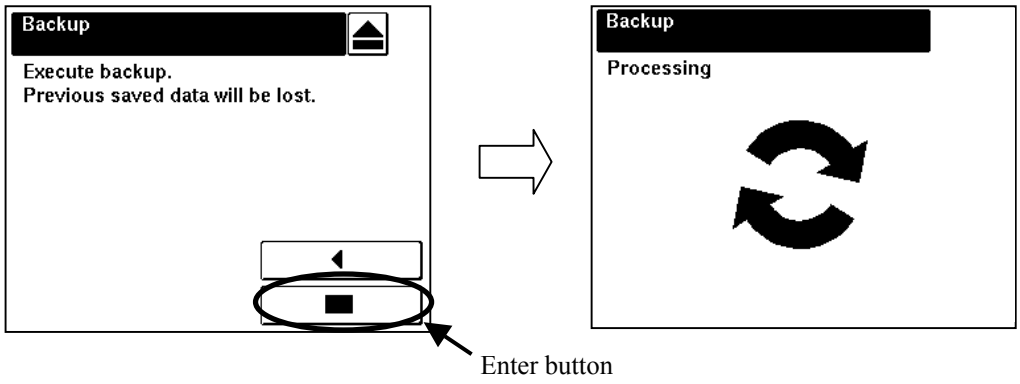
4. Touch the Next Screen button once to display the next screen, and touch "Backup/Restore" button.



5. Touch the “Backup” button, and touch “All” button.

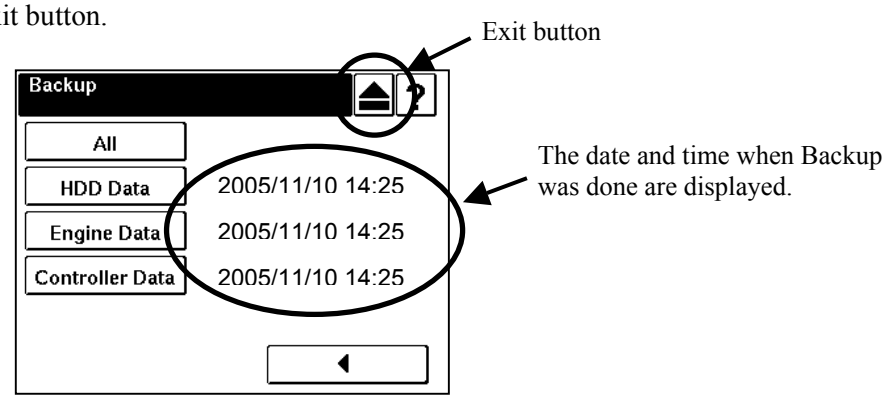


6. Touch the Enter button, then the screen shows the Backup processing.



Note:The Backup time will take approx. 1 minutes.

7. Touch the Exit button.



8. Execute the “Set IP Address of the Network Board Ass’y”(page 9) again.
9. Execute the “Print Status Page”(page 2) again.

Table1. Printer setting value list reset in initial value by Factory Default

Items				Factory Default
OCP : Printer Menu				
Paper Source	Default Paper Source			AutoSelect
	Paper Size	Tray1	Standard Paper Size	Folio SEF
			Custom Size(Width)	8.5″/215.9mm
			Custom Size(Length)	11″/279.4mm
		Tray2	Standard Paper Size	Folio SEF
			Custom Size(Width)	8.5″/215.9mm
			Custom Size(Length)	11″/279.4mm
		Tray3	Standard Paper Size	Folio SEF
			Custom Size(Width)	8.5″/215.9mm
			Custom Size(Length)	11″/279.4mm
		MBT	Standard Paper Size	Letter LEF *2
			Custom Size(Width)	8.5″/215.9mm
			Custom Size(Length)	11″/279.4mm
	Paper Type	Tray1		Plain
		Tray2		Plain
		Tray3		Plain
		MBT		Plain
		HCF *1		Plain
	Paper Weight	Tray1		20-lb bond
		Tray2		20-lb bond
		Tray3		20-lb bond
		MBT		20-lb bond
		HCF *1		20-lb bond
	Tray Adjust	Tray1	Front - Width/Length	0″ / 0″
			Back - Width/Length	0″ / 0″
		Tray2	Front - Width/Length	0″ / 0″
			Back - Width/Length	0″ / 0″
		Tray3	Front - Width/Length	0″ / 0″
			Back - Width/Length	0″ / 0″
		MBT	Front - Width/Length	0″ / 0″
		HCF *1	Front - Width/Length	0″ / 0″
			Back - Width/Length	0″ / 0″

*1 : It is displayed when the optional item(s) are installed.

*2 : This value depends with the setting of the country code in system menu. When the country code setting is one, this value is Letter LEF. When other values one set in country code. It becomes A4 LEF.

Continuation of Table 1

Items				Factory Default
OCP : Printer Menu				
Default Output				Elevator Tray
Option	Exit-Jam Recovery			Enable
	Wait TimeOut			40
	LPD Queuing			Disable
	Duplex-Always			Disable
Postscript *1	Print Errors			Enable
	Best Fit			Enable
	Job TimeOut			0
	Halftone Density			Medium
PCL	Wide A4			Disable
	Requested Tray			Exclusively
OCP : Setup Menu				
OCP	Blightness			10
	Contrast			10
Service	Halftone Selection			Disable
System	Parallel	Ack Pulse Width		1000
		Mode		Bi-Directional
		Capture to file		Disable
	Network (AUX)	Boot Method		STATIC
		HTTP		80
	Calendar	TimeZone		GMT
	Energy Save Mode			Enable
	Energy Save Time			15
	Emulation			AutoSelect
		Postscript		TBCP
	public r/w			Disable
	Auto Online			Disable
Language				English
Web : Manage - System Menu				
General	Option	Auto Feed Direction		Disable
		Exit Jam Recovery		Enable
		Wait Timeout (0-999)		40
		*PDL Memory Size (6-50)		16
	PostScript *1	Print Errors		Enable
		Best Fit		Enable
		Job Timeout (0, 15-999)		0
		*Memory Size (7.5 - 15)		7.8
Finisher	STAPLER ERROR - ADVANCED FINISHER			Continue
Virtual Printer	Default	General	Emulation	Auto Select
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Long Edge
			Edge-to-Edge	Disable

*1 : It is displayed when the optional item(s) are installed.

Continuation of Table 1

Items				Factory Default
Web : Manage – System Menu				
Virtual Printer	Default	PCL *3	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *1*4	PostScript I/O Mode	TBCP
			^C Response	Enable
	lp	General	Channel Name	lp
			Emulation	Auto Select
			Protocol	TCP/IP port 9100
			Spooling *5	None
			LPD Banner Page	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *3	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *1*4	PostScript I/O Mode	TBCP
			^C Response	Enable
	vp-pcl	General	Channel Name	vp-pcl
			Emulation	PCL
			Protocol	3101
			Spooling *5	None
			LPD Banner Page	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable

*1 : It is displayed when the optional item(s) are installed.

*3 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*4 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*5 : It is not displayed when the NIC is installed.

Continuation of Table 1

Items				Factory Default
Web : Manage – System Menu				
Virtual Printer	vp-pcl	Paper Handling	Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *3	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *1*4	PostScript I/O Mode	Normal
			^C Response	Enable
	postscript	General	Channel Name	postscript
			Emulation	PCL
			Protocol	3102
			Spooling *5	None
			LPD Banner Page	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *3	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *1*4	PostScript I/O Mode	Normal
			^C Response	Enable
	ascii_portrait	General	Channel Name	ascii_portrait
			Emulation	PCL
			Protocol	3104
			Spooling *5	None
			LPD Banner Page	Disable

*1 : It is displayed when the optional item(s) are installed.

*3 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*4 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*5 : It is not displayed when the NIC is installed.

Continuation of Table 1

Items				Factory Default
Web : Manage – System Menu				
Virtual Printer	ascii_portrait	Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *3	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *1*4	PostScript I/O Mode	Normal
			^C Response	Enable
	ascii_landscape	General	Channel Name	ascii_landscape
			Emulation	PCL
			Protocol	3105
			Spooling *5	None
			LPD Banner Page	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *3	Page Orientation	Landscape
			Page Length (5 – 127)	45
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *1*4	PostScript I/O Mode	Normal
			^C Response	Enable

*1 : It is displayed when the optional item(s) are installed.

*3 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*4 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*5 : It is not displayed when the NIC is installed.

Continuation of Table 1

Items				Factory Default
Web : Manage – System Menu				
Virtual Printer	lp_portrait	General	Channel Name	lp_portrait
			Emulation	PCL
			Protocol	3106
			Spooling *5	None
			LPD Banner Page	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *3	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *1*4	PostScript I/O Mode	Normal
			^C Response	Enable
	lp_landscape	General	Channel Name	lp_landscape
			Emulation	PCL
			Protocol	3107
			Spooling *5	None
			LPD Banner Page	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *3	Page Orientation	Landscape
			Page Length (5 – 127)	45
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23

*1 : It is displayed when the optional item(s) are installed.

*3 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*4 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*5 : It is not displayed when the NIC is installed.

Continuation of Table 1

Items				Factory Default
Web : Manage – System Menu				
Virtual Printer	lp_landscape	PCL *3	Font-Symbol Set	PC-8
			Font-Height (4 - 999.75)	12
			Font-Pitch (0.44 - 99.99)	15
		PostScript *1*4	PostScript I/O Mode	Normal
			^C Response	Enable
	pdf	General	Channel Name	pdf
			Emulation	PDF
			Protocol	3109
			Spooling *5	None
			LPD Banner Page	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *3	Page Orientation	Portrait
			Page Length (5 - 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 - 999.75)	12
			Font-Pitch (0.44 - 99.99)	10
		PostScript *1*4	PostScript I/O Mode	Normal
			^C Response	Enable
	tiff	General	Channel Name	tiff
			Emulation	TIFF
			Protocol	3110
			Spooling *5	None
			LPD Banner Page	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable

*1 : It is displayed when the optional item(s) are installed.

*3 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*4 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*5 : It is not displayed when the NIC is installed.

Continuation of Table 1

Items				Factory Default
Web : Manage – System Menu				
Virtual Printer	tiff	PCL *3	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *1*4	PostScript I/O Mode	Normal
			^C Response	Enable
	pclxl	General	Channel Name	pclxl
			Emulation	pclxl
			Protocol	3112
			Spooling *5	None
			LPD Banner Page	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *3	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *1*4	PostScript I/O Mode	Normal
			^C Response	Enable
	prt2file *5	General	Channel Name	prt2file
			Emulation	Auto Select
			Protocol	7101
			Spooling *5	Capture to File
			Maxmun File Size *5	20000
			LPD Banner Page	Disable

*1 : It is displayed when the optional item(s) are installed.

*3 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*4 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*5 : It is not displayed when the NIC is installed.

Continuation of Table 1

Items				Factory Default
Web : Manage – System Menu				
Virtual Printer	prt2file *5	Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *3	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *1*4	PostScript I/O Mode	Normal
			^C Response	Enable
	text	General	Channel Name	text
			Emulation	Auto Select
			Protocol	3100
			Spooling *5	None
			LPD Banner Page	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Elevator Tray
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Staple	None
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *3	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR-LF LF->CR-LF FF->CR-FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *1*4	PostScript I/O Mode	TBCP
			^C Response	Enable

*1 : It is displayed when the optional item(s) are installed.

*3 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*4 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*5 : It is not displayed when the NIC is installed.

Continuation of Table 1

Items				Factory Default
Web : Manage – Configuration Menu				
General	Customer	Company Legal Name		(blank)
		Phone Number		(blank)
		Fax Number		(blank)
		Street Address		(blank)
		City, State/Region, Zip/Postal Code		(blank)
		Country		(blank)
	Printer	Name		DDP70 or DDP92
		Location		(blank)
	Service Contact	Name		(blank)
		Phone Number		(blank)
		Fax Number		(blank)
		E-mail		(blank)
	Accounting Information	Accounting Period Start Day of the Manth:		1
Events	Non Paper Jam Error	Check Box		Disable
	Jam Error Warning	Check Box		Disable
		Times		3
	Toner Low	Check Box		Disable
	Staple Empty	Check Box		Disable
	Accounting	Check Box		Disable
Configuration	Misc	Calendar	Time Server (Primary)	(blank)
			Time Server (Secondary)	(blank)
			Synchronization Time	0
			Set Manually	Enable
			Use Daylight Saving	Disable
			Start with	3, 1, 2
			End with	10, 1, 2
		Tray Mapping	Default Tray Mapping	100/200
		ID 0	106/206	0
			107/207	0
		ID 1	106/206	1
			107/207	1
		ID 2	106/206	4
			107/207	4
		ID 3	106/206	4
			107/207	4
		ID 4	106/206	5
			107/207	5
		ID 5	106/206	2
			107/207	2
		ID 6	106/206	4
			107/207	4
		ID 7	106/206	1,2,3,5
			107/207	1,2,3,5
		ID 8	106/206	3
			107/207	3
		ID9 – 19	106/206	0
			107/207	0

Continuation of Table 1

Items				Factory Default
Web : Manage – Configuration Menu				
Configuration	Misc	ID20	106/206	4
			107/207	4
		ID21	106/206	5
			107/207	5
		ID 22 – 69	106/206	0
			107/207	0
Communication	TCP/IP(AUX)	SMTP Server Address		0 , 0 , 0 , 0
		Domain Name		(blank)
		Internet Printing Protocol (IPP)		Enable
		Direct Printing with TCP		Enable
		LPR/LPD		Enable
		FTP		Disable
Web : Service – Configuration Menu				
Events	Preventive Maintenance Warning	Check Box		Disable
		Percent		95
	Preventive Maintenance	Check Box		Disable
	Engine Page Count Exceeds	Check Box		Disable
		KPages		200
	Printer Logs	Check Box		Disable
		KPages		200
Dealer	Name			(blank)
	Phone Number			(blank)
	Fax Number			(blank)
	Street Address			(blank)
	City, State/Region, Zip/Postal Code			(blank)
	Country			(blank)
	E-Mail			(blank)
	URL			(blank)

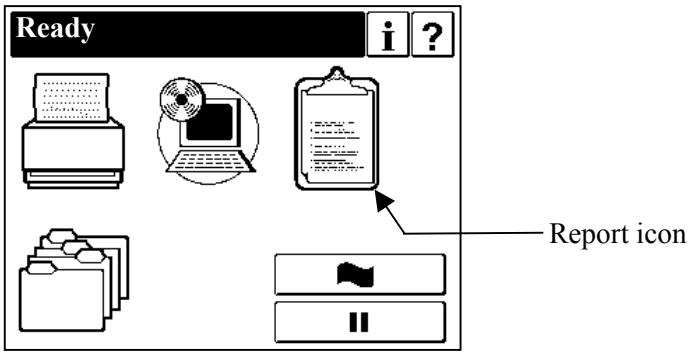
3. Installing for the EMP156

Note: The GND Plate(LBM) and the ferrite core are not used for EMP156.

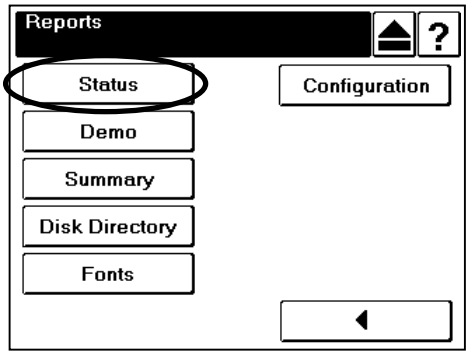
Print the Status Page

Please print the Status Page in order to confirm the printer works normally before installing Network Board Ass'y.

1. Power on the printer and touch the Report icon after displayed the Main Menu.



2. Touch "Status" button. And the Status Page is printed.



Accessing the Controller Assembly

1. Make sure you have shut down the printer and unplugged the power cable from the wall.
2. Remove all external cables connected to the left side panel.
3. Remove the Rear cover (R) by removing the screws.

Rear cover (R)

4. Remove twelve screws that secure the Controller box (CE box) cover.

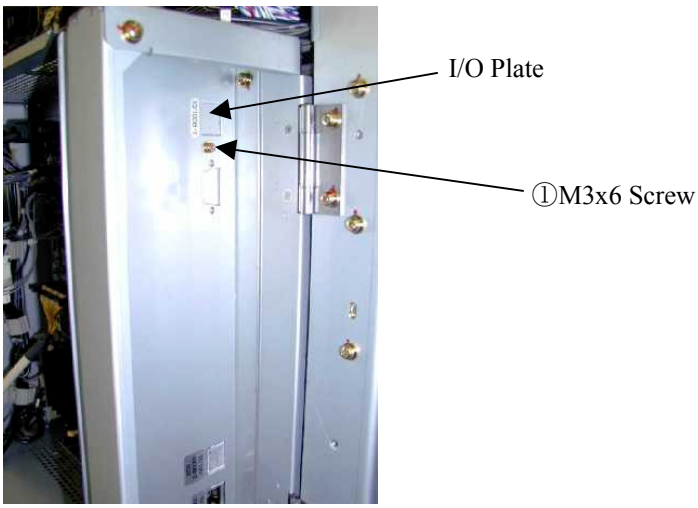
Controller box (CE box) cover

CAUTION!
The HDD is attached to the CE box cover and has a cable connection. Take precautions to not damage the HDD cable when removing the CE box cover from the printer.

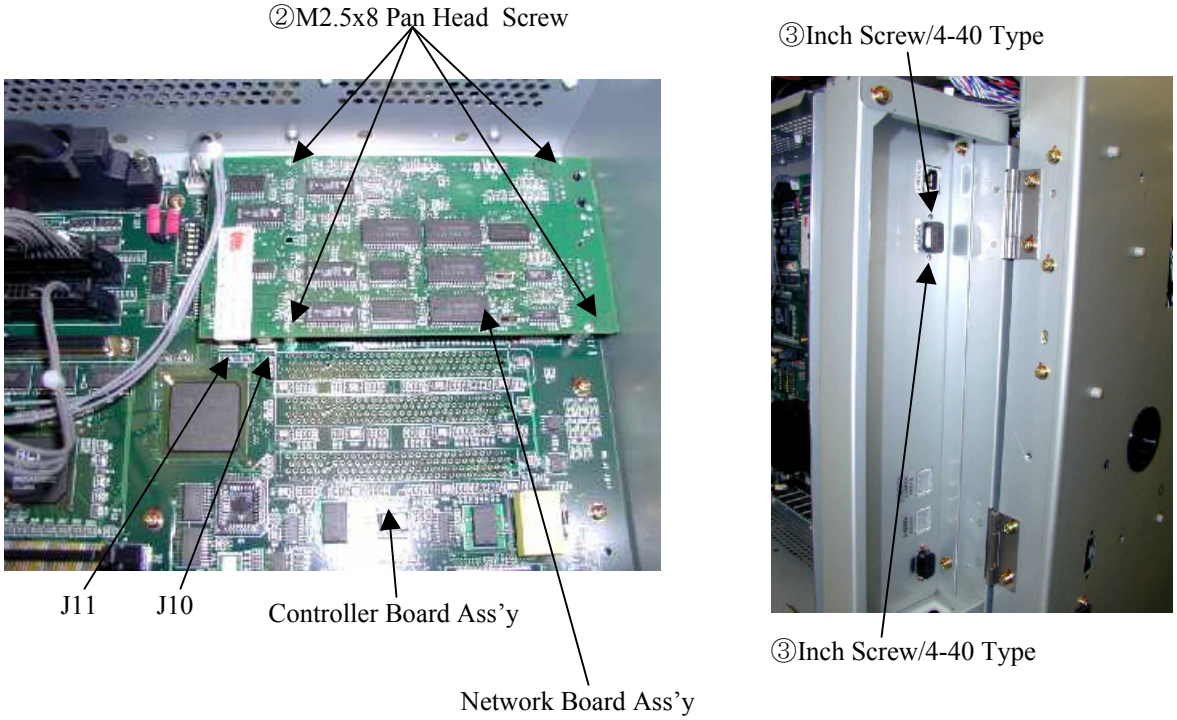
5. Unplug the HDD cable from controller board connector J6.
6. Unplug the FAN cable from controller board connector J21.
7. Unplug the HDD power cable from the HDD.
8. Release the FAN cable and the HDD power cable from the cable clamps on the CE box cover.
9. Remove the CE box cover from the CE box.

Installing the Network Board Ass'y

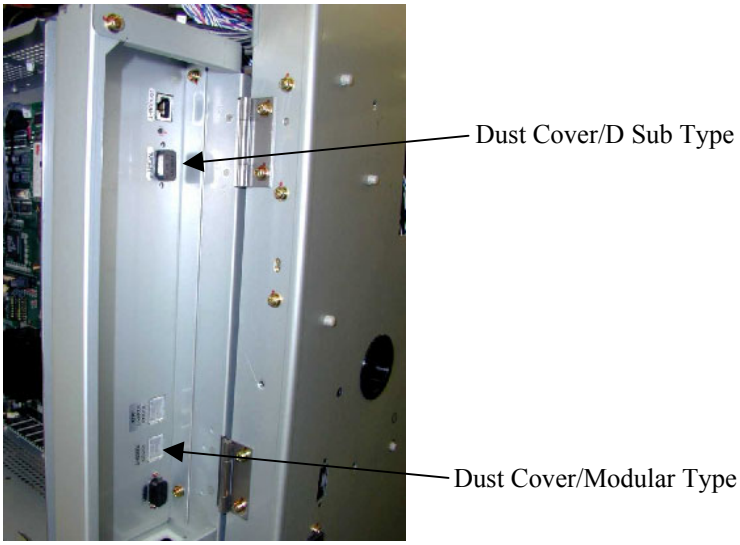
1. Remove the screw①(M3x6 Screw) and remove the I/O Plate.



2. Set the Network Board Ass'y on J10 and J11 of the Controller Board Ass'y, and fix the Network Board Ass'y with four screws②(M2.5x8 Pan Head Screw/ Installation Requirements No.7) and two screws③ (Inch Screws/4-40 Type/Installation Requirements No.6).



3. Attach the Dust Cover/D Sub Type(Installation Requirements No.3) to the MGMT of the Network Board Ass'y, and attach the Dust Cover/Modular Type(Installation Requirements No.2) to the 10/100/1000B-T of the Controller Board Ass'y.



CAUTION!
When installing the Network Board Ass'y, the 10/100/1000B-T network port(attached the Dust Cover/Modular Type) of the Controller Board Ass'y does not work.

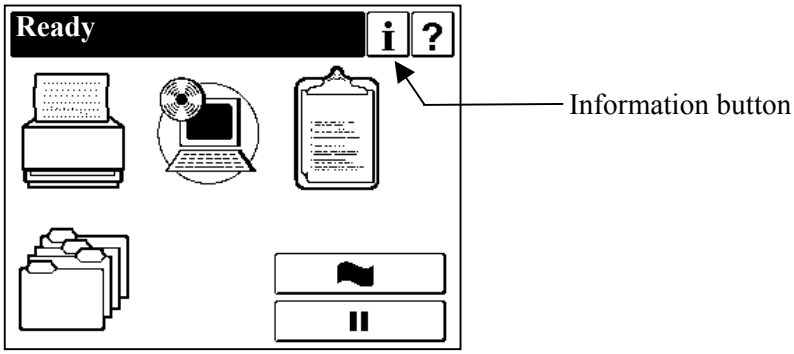
Installing the CE box cover and the Rear cover(R)

1. Plug the HDD power cable to the HDD.
2. Plug the FAN cable to controller board connector J21.
3. Plug the HDD cable to controller board connector J6.
4. Install the CE box cover with the twelve screws.
5. Install the Rear cover(R) of the printer with the four screws.

Note: Refer to the "Accessing the Controller Assembly"

Confirmation of Connection

1. Connect one end of the Ethernet cable in the network environment to the 10/100B-T connector on the Network Board Ass'y.
2. Plug the power cable of the printer.
3. Power on the printer, and touch "Information" button after "Ready" is displayed on the OCP.



CAUTION!
When turning on the printer, confirm the power supply of the network equipment (user environment) connected with the network cable is turned on. It becomes the network loading error, and the following work cannot be executed.

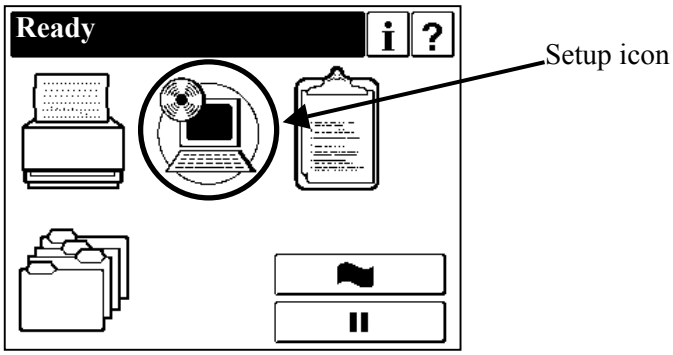
4. Touch "Network" button, and confirm that "10/100/1000B-T" and "10/100B-T NIC" buttons are displayed on the OCP. If these two network interfaces are displayed, the printer recognizes the Network Board Ass'y normally.

   If the two network interfaces are not displayed but MAC address, IP address, and other network parameters are displayed, the printer does not recognize the Network Board Ass'y. There is a possibility of the loose connection when the Network Board Ass'y is installed. Check out the attachment procedure and then repeat the above-mentioned steps.

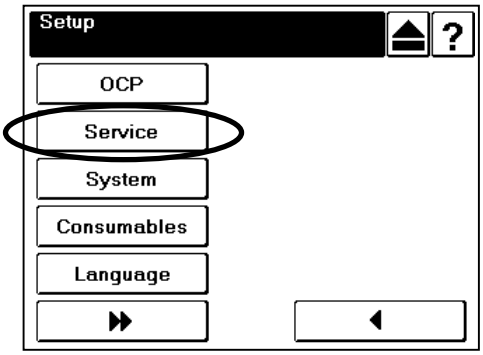
Upgrading of the Network Board Ass'y Software

Perform the upgrading of the print server software according to the procedure shown below.

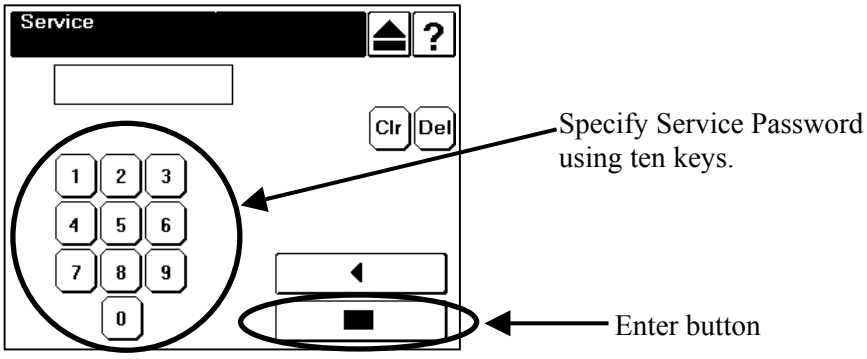
1. Touch the Setup icon on Main Menu.



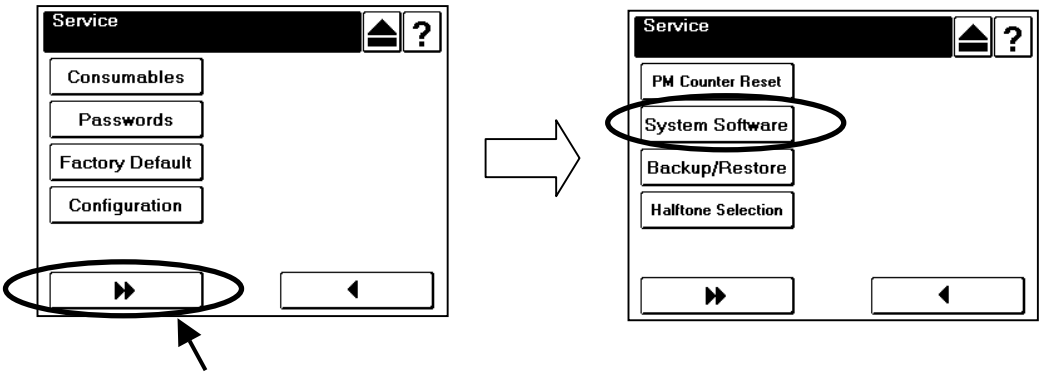
2. Touch "Service" button.



3. The input screen of "Service Password" is displayed. Touch the Enter button to enter "Service" menu without inputting the Service Password (factory-set default). When the Service Password is changed, type the new value and touch the Enter button.

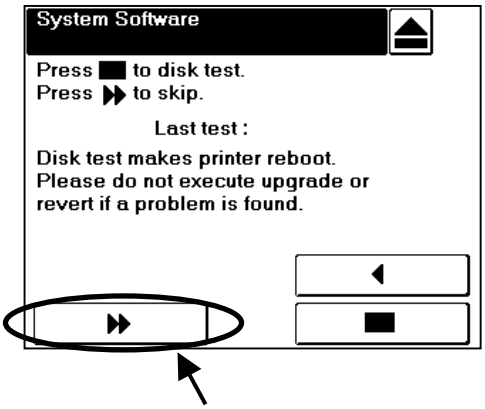


4. Touch the Next Screen button once to display the next screen, and touch "System Software" button.



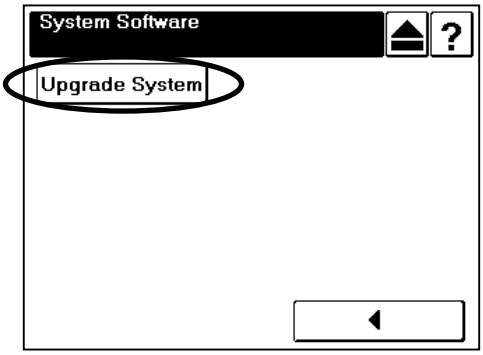
Next Screen button

5. Touch the Next Screen button to skip the disk test.

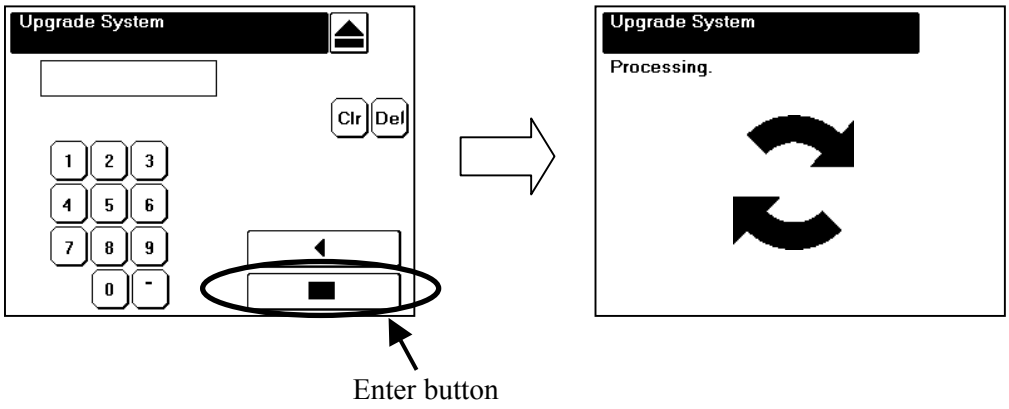

System Software
Press to disk test.
Press to skip.
Last test :
Disk test makes printer reboot.
Please do not execute upgrade or
revert if a problem is found.

Next Screen button

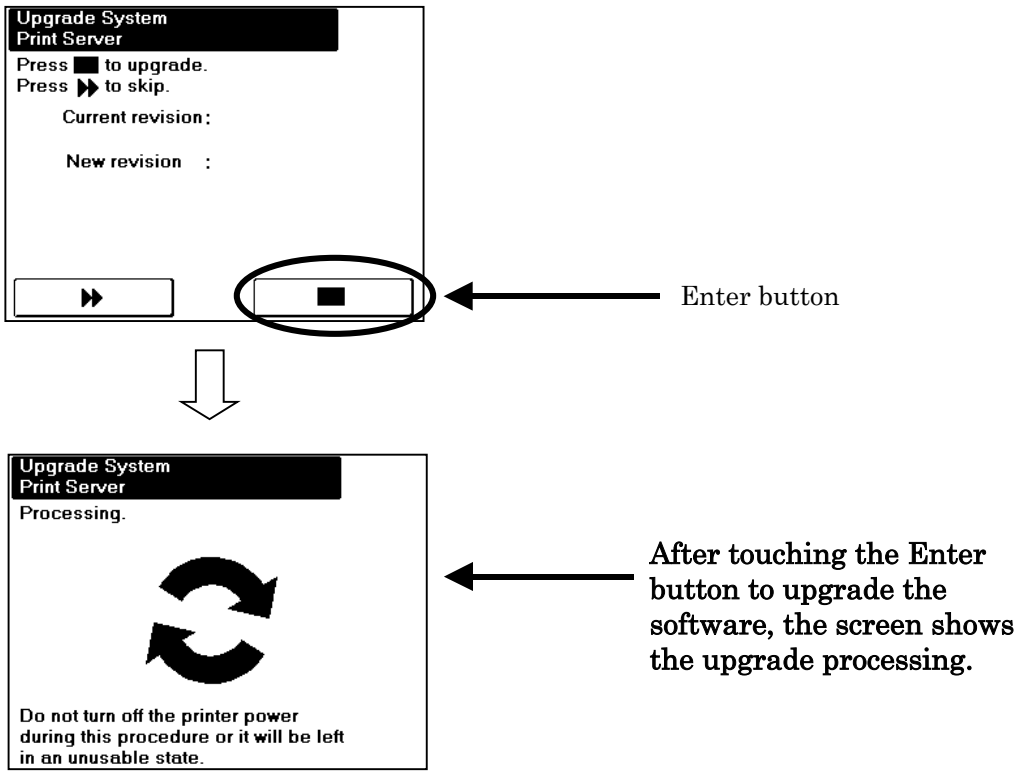
6. Touch “Upgrade System” button.



7. Touch the Enter button without inputting any Keycode because it is already set.
   The printer starts processing to prepare the upgrading. (It takes about 3 - 4 minutes.)



8. After the completion of upgrade preparation, the New Print Server Software Version is displayed on "New version" of the Print Server Upgrade screen. Touch the Enter button to upgrade the Print Server software.

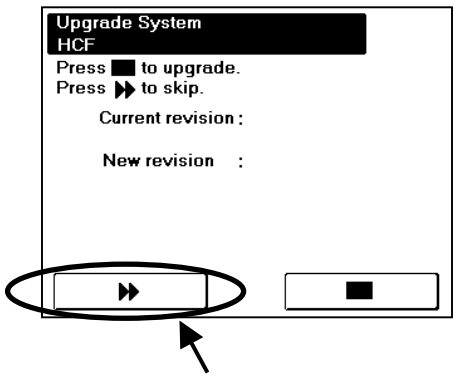

Upgrade System
Print Server
Press ■ to upgrade.
Press ▶▶ to skip.
Current revision:
New revision :
Enter button
Upgrade System
Print Server
Processing.
Do not turn off the printer power
during this procedure or it will be left
in an unusable state.
After touching the Enter button to upgrade the software, the screen shows the upgrade processing.

(NOTE) The upgrading time of the Print Server software will take 2 minutes.

9. After finishing the Print Server upgrading, other upgrade screens (HCF[*1], Container Stacker 2[*2], Container Stacker 1, Print Engine-FPGA, Print Engine-Slave, Print Engine-Master, Controller, OCP Logo and OCP) are displayed. <u>You have to skip them by touching the Next Screen button.</u>

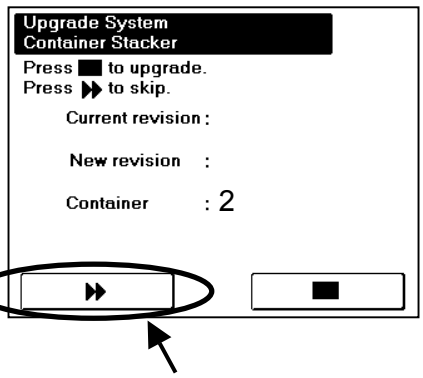
*1 : This menu is displayed only when the HCF is connected.

*2 : This menu is displayed only when the Container Stacker 2 is connected.



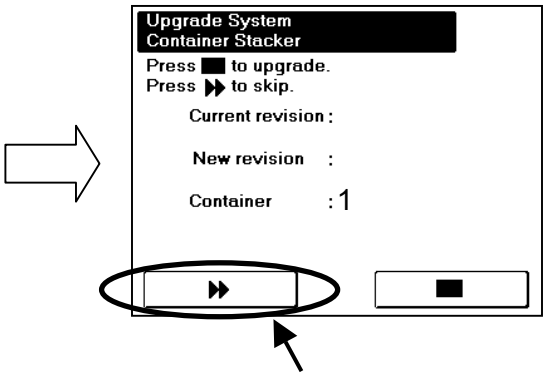
Next Screen button

(NOTE)This menu is displayed only when the HCF is connected.



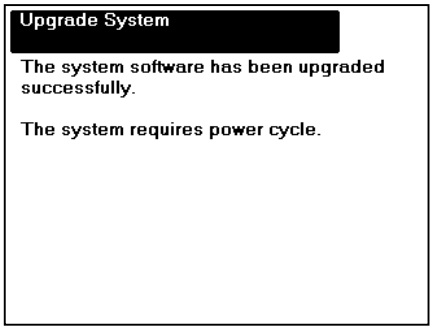
Next Screen button

(NOTE)This menu is displayed only when the Container Stacker 2 is connected.



Next Screen button

10. The following screen is displayed after skipping all other upgrade screens except the Print Server. Turn off and on the printer to restart with the upgraded software.

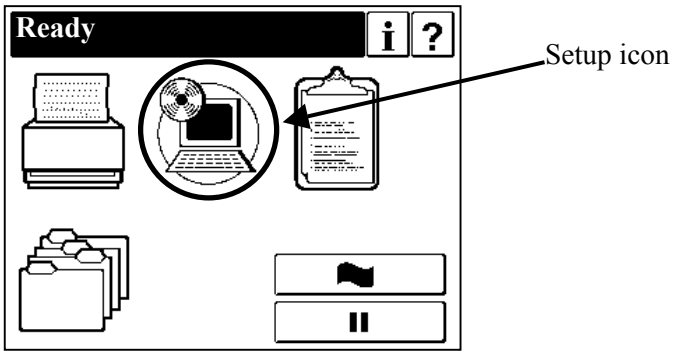


The software (Print Server) upgrade of the Network board Ass'y is completion now.

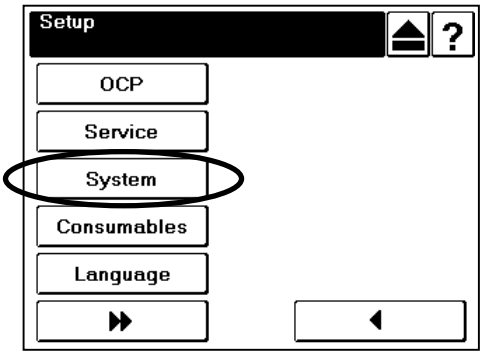
Set IP Address of the Network Board Ass'y

Perform the setting of IP Address according to the procedure shown below.

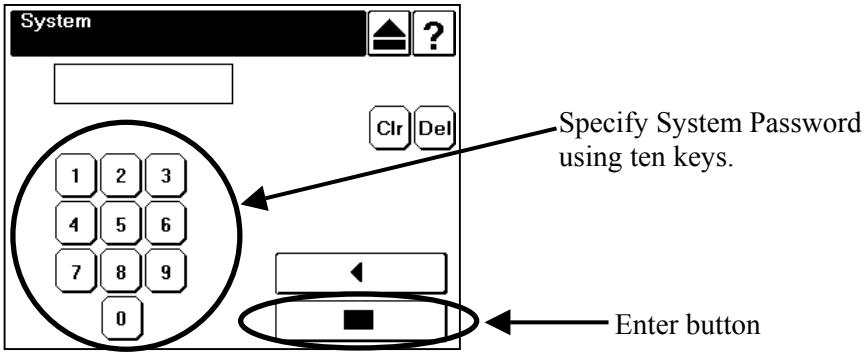
1. Touch the Setup icon on Main Menu.



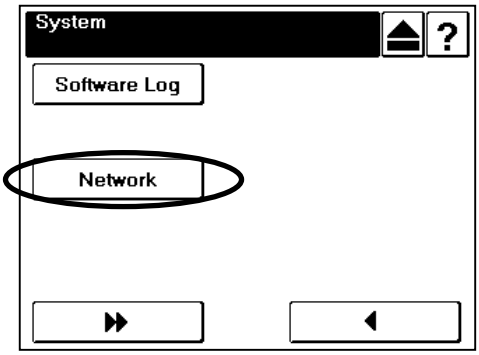
2. Touch "System" button.



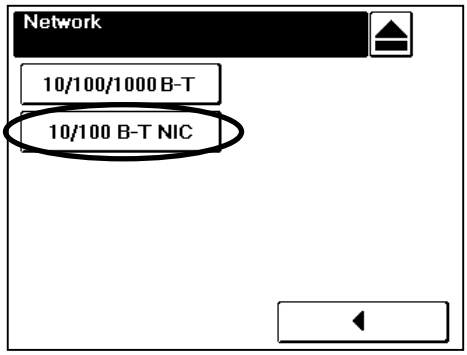
3. The input screen of "System Password" is displayed. Touch the Enter button to enter "System" menu without inputting the System Password (factory-set default). When the System Password is changed, type the new value and touch the Enter button.



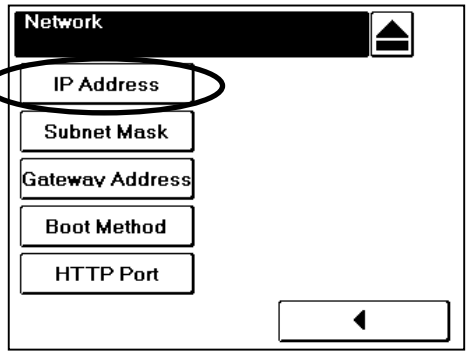
4. Touch “Network” button.



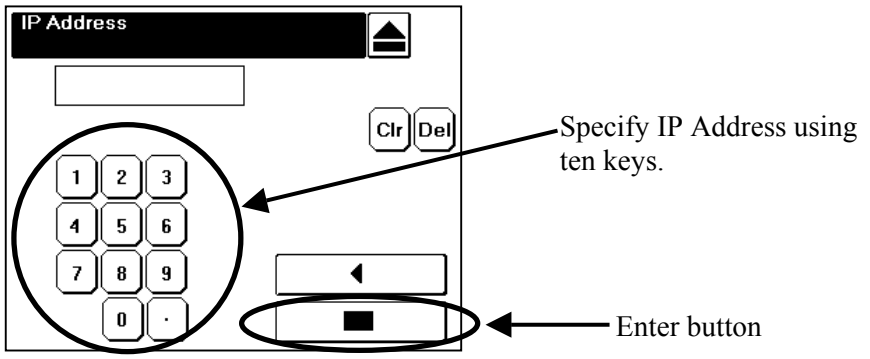
5. Touch “10/100B-T NIC” button.



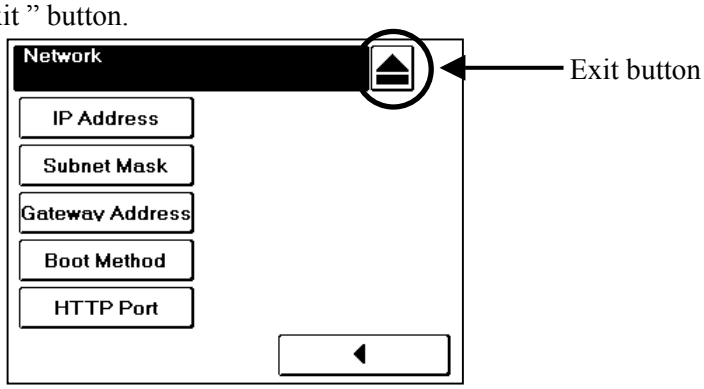
6. Touch “IP Address” button.



7. Enter IP Address for user environment by using ten keys, and touch the Enter button.



8. Touch “Exit ” button.



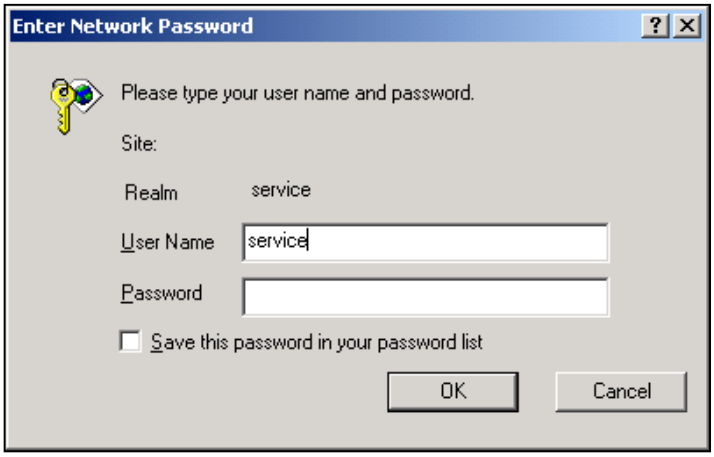
Reset to Factory Default of the Controller configuration and the Network Board Ass'y

CAUTION!
When Factory Default is executed, please note that the following matter is generated.
(1)Various printer setting values(indicated in table2) changed by user are reset to the factory default value.
(2)VPT added by user is deleted.

1. Start the Internet Explorer from PC and enter the IP Address that set upper section.

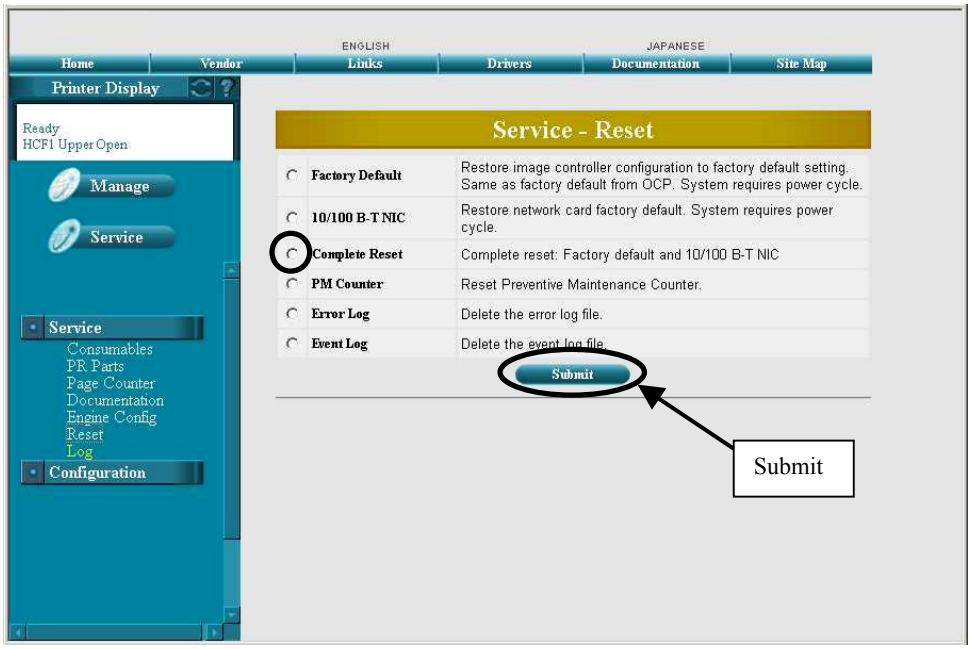
2. Click "Service" button after displaying the first page as follows.

3. After displaying the page of the Enter Network Password, enter "service" in User Name and click "OK" button without entering the Password (factory-set default). When the Service Password is changed, enter the new value and click "OK" button.

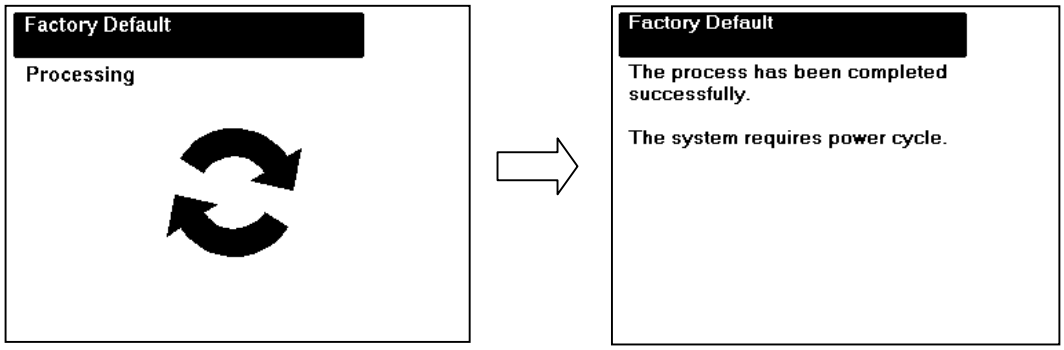


4. Click “Reset” button.

5. Check the “Complete Reset” and click the “Submit” button.

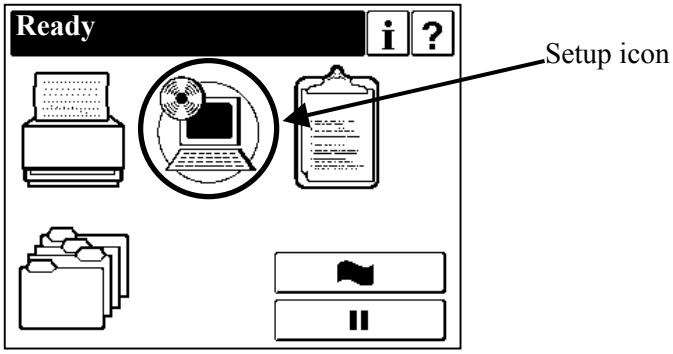


6. After the above-mentioned operation is executed, the following screens are displayed in OCP of the printer. Then execute power cycle the printer.

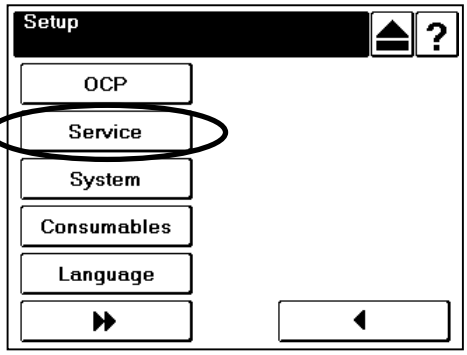


Backup All

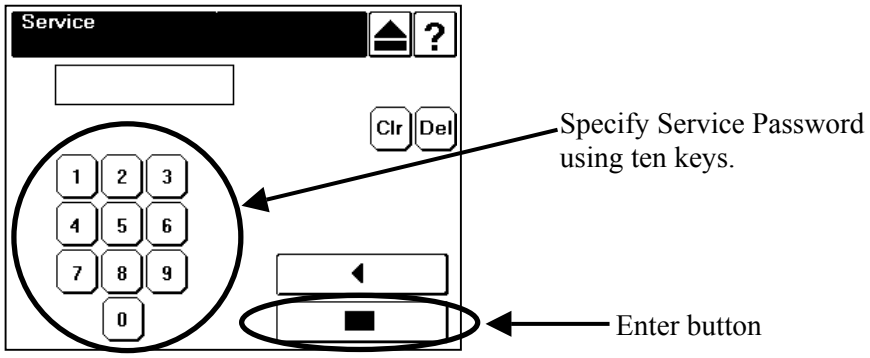
1. Power on the printer.
2.Touch the Setup icon on Main Menu.



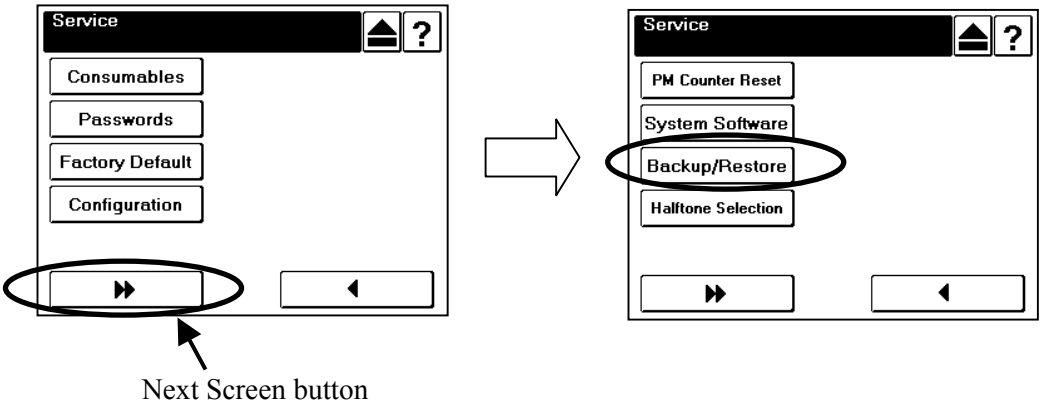
3. Touch “Service” button.



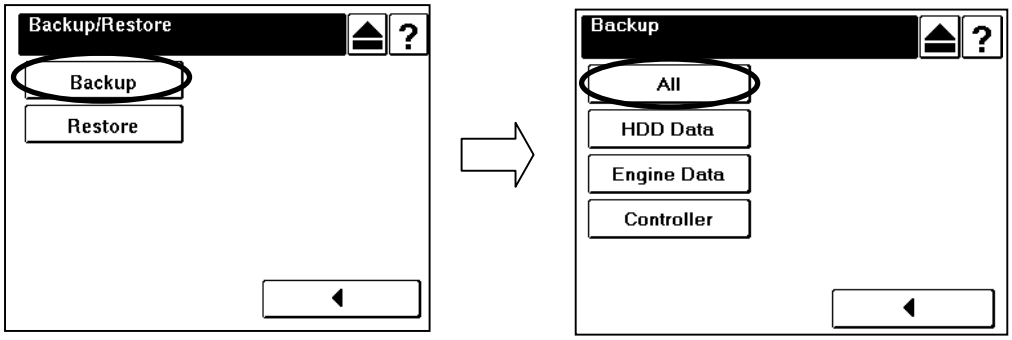
4. The input screen of “Service Password” is displayed. Touch the Enter button to enter “Service” menu without inputting the Service Password (factory-set default). When the Service Password is changed, type the new value and touch the Enter button.



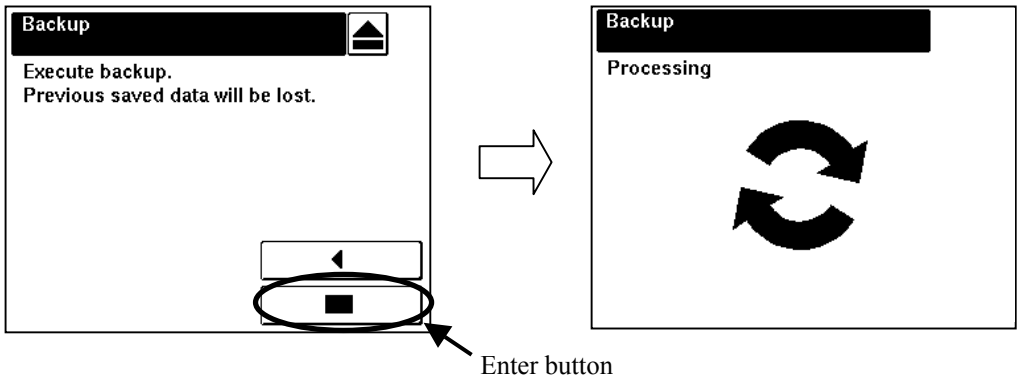
5. Touch the Next Screen button once to display the next screen, and touch "Backup/Restore” button.



6. Touch the “Backup” button, and touch “All” button.

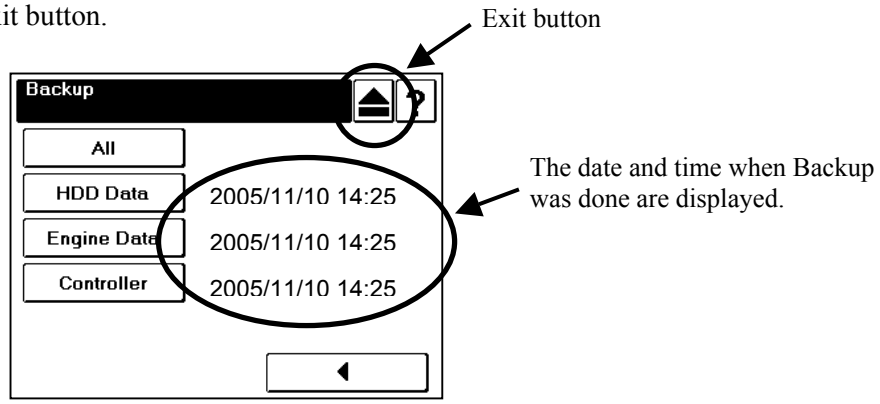


7. Touch the Enter button, then the screen shows the Backup processing.



Note:The Backup time will take approx. 1 minutes.

8. Touch the Exit button.



9. Execute the “Set IP Address of the Network Board Ass’y”(page 36) again.

10. Execute the “Print Status Page”(page 27) again.

Table2. Printer setting value list reset in initial value by Factory Default

Items				Factory Default
OCP:Printer Menu				
Paper Source	Default Paper Source			AutoSelect
	Paper Size	Tray1	Standard Paper Size	Folio SEF
			Custom Size(Width)	8.5″/215.9mm
			Custom Size(Length)	11″/279.4mm
		Tray2	Standard Paper Size	Folio SEF
			Custom Size(Width)	8.5″/215.9mm
			Custom Size(Length)	11″/279.4mm
		HCF1 Lower	Standard Paper Size	Folio SEF
			Custom Size(Width)	8.5″/215.9mm
			Custom Size(Length)	11″/279.4mm
		HCF1 Upper	Standard Paper Size	Folio SEF
			Custom Size(Width)	8.5″/215.9mm
			Custom Size(Length)	11″/279.4mm
		HCF2 Lower	Standard Paper Size	Folio SEF
			Custom Size(Width)	8.5″/215.9mm
			Custom Size(Length)	11″/279.4mm
		HCF2 Upper	Standard Paper Size	Folio SEF
			Custom Size(Width)	8.5″/215.9mm
			Custom Size(Length)	11″/279.4mm
	Paper Type	Tray1		Plain
		Tray2		Plain
		HCF1 Lower		Plain
		HCF1 Upper		Plain
		HCF2 Lower		Plain
		HCF2 Upper		Plain
	Paper Color			White
	Paper Weight	Tray1		20-lb bond
		Tray2		20-lb bond
		HCF1Lower		20-lb bond
		HCF1 Upper		20-lb bond
		HCF2 Lower		20-lb bond
		HCF2 Upper		20-lb bond
	HV Adjust	Front - Width/Length		0″ / 0″
		Back - Width/Length		0″ / 0″
Default Output	Default Output			CS1 Lower
	Stacking Level	1Lower:Short		100%
		1Lower:Long		100%
		1Upper:Short		100%
		1Upper:Long		100%
		2Lower:Short		100%
		2Lower:Long		100%
		2Upper:Short		100%
		2Upper:Long		100%
Option	Exit-Jam Recovery			Enable
	Wait TimeOut			40
	LPD Queuing			Disable
	Duplex-Always			Disable
	Auto Proof Sample			0

Continuation of Table 2

Items				Factory Default
Postscript	Print Errors			Enable
	Best Fit			Enable
	Job TimeOut			0
	Hafltone Density *4			Medium
PCL	Wide A4			Disable
	Requested Tray			Exclusively
OCP : Setup Menu				
OCP	Blightness			10
	Contrast			10
	Volume			3
Service	Halftone Selection			Disable
System	Network (AUX)	Boot Method		STATIC
		HTTP		80
	Calendar	TimeZone		GMT
	Energy Save Mode			Enable
	Energy Save Time			15
	public r/w			Disable
Language				English
Web : Manage – System Menu				
General	Option	Exit Jam Recovery		Enable
		Wait Timeout (0-999)		40
		*PDL Memory Size (6-50)		16
	PostScript	Print Errors		Enable
		Best Fit		Enable
		Job Timeout (0, 15-999)		0
		*Memory Size (7.5 – 15)		11.8
Tray	HV Adjust			0,0,0,0
	Paper Color			Color 1 – Color 16
Virtual Printer	Default	General	Emulation	Auto Select
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	CS1 Lower
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Long Edge
			Edge-to-Edge	Disable
		PCL *1	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10

*1 : It is displayed when the values other than "Postscript" are set in "General – Emulation" menu.

*4 : It is displayed when [Setup]-[Service]-[Halftone Selection] is set to Enable.

Continuation of Table 2

Items				Factory Default
Virtual Printer	Default	PostScript *2	PostScript I/O Mode	TBCP
			^C Response	Enable
			Paper Color	White
	lp	General	Channel Name	lp
			Emulation	Auto Select
			Protocol	9100
			Spooling *3	None
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *1	Page Orientation	Portrait
			Page Length (5 - 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 - 999.75)	12
			Font-Pitch (0.44 - 99.99)	10
		PostScript *2	PostScript I/O Mode	TBCP
			^C Response	Enable
			Paper Color	White
	text	General	Channel Name	text
			Emulation	Auto Select
			Protocol	3100
			Spooling *3	None
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable

*1 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*2 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*3 : It is not displayed when the NIC is installed.

Continuation of Table 2

Items				Factory Default
Virtual Printer	text	PCL *1	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR-LF ; LF->CR-LF ; FF->CR-FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *2	PostScript I/O Mode	TBCP
			^C Response	Enable
			Paper Color	White
	vp-pcl	General	Channel Name	vp-pcl
			Emulation	PCL
			Protocol	3101
			Spooling *3	None
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *1	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *2	PostScript I/O Mode	Normal
			^C Response	Enable
			Paper Color	White

*1 : It is displayed when the values other than "Postscript" are set in "General – Emulation" menu.

*2 : It is displayed when the values other than "PCL" are set in "General – Emulation" menu.

*3 : It is not displayed when the NIC is installed.

Continuation of Table 2

Items				Factory Default
Virtual Printer	Postscript	General	Channel Name	postscript
			Emulation	PostScript
			Protocol	3102
			Spooling *3	None
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *1	Page Orientation	Portrait
			Page Length (5 - 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 - 999.75)	12
			Font-Pitch (0.44 - 99.99)	10
		PostScript *2	PostScript I/O Mode	Normal
			^C Response	Enable
			Paper Color	White
	ascii_portrait	General	Channel Name	ascii_portrait
			Emulation	PCL
			Protocol	3104
			Spooling *3	None
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable

*1 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*2 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*3 : It is not displayed when the NIC is installed.

Continuation of Table 2

Items				Factory Default
Virtual Printer	ascii_portrait	PCL *1	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *2	PostScript I/O Mode	Normal
			^C Response	Enable
			Paper Color	White
	ascii_landscape	General	Channel Name	ascii_landscape
			Emulation	PCL
			Protocol	3105
			Spooling *3	None
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *1	Page Orientation	Landscape
			Page Length (5 – 127)	45
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *2	PostScript I/O Mode	Normal
			^C Response	Enable
			Paper Color	White
	lp_portrait	General	Channel Name	lp_portrait
			Emulation	PCL
			Protocol	3106
			Spooling *3	None
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable

*1 : It is displayed when the values other than "Postscript" are set in "General – Emulation" menu.
*2 : It is displayed when the values other than "PCL" are set in "General – Emulation" menu.
*3 : It is not displayed when the NIC is installed.

Continuation of Table 2

Items				Factory Default
Virtual Printer	lp_portrait	Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *1	Page Orientation	Portrait
			Page Length (5 - 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 - 999.75)	12
			Font-Pitch (0.44 - 99.99)	10
		PostScript *2	PostScript I/O Mode	Normal
			^C Response	Enable
			Paper Color	White
	lp_landscape	General	Channel Name	lp_landscape
			Emulation	PCL
			Protocol	3107
			Spooling *3	None
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *1	Page Orientation	Landscape
			Page Length (5 - 127)	45
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 - 999.75)	12
			Font-Pitch (0.44 - 99.99)	15

*1 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*2 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*3 : It is not displayed when the NIC is installed.

Continuation of Table 2

Items				Factory Default
Virtual Printer	lp_landscape	PostScript *2	PostScript I/O Mode	Normal
			^C Response	Enable
			Paper Color	White
	pdf	General	Channel Name	pdf
			Emulation	PDF
			Protocol	3109
			Spooling *3	None
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *1	Page Orientation	Portrait
			Page Length (5 - 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 - 999.75)	12
			Font-Pitch (0.44 - 99.99)	10
		PostScript *2	PostScript I/O Mode	Normal
			^C Response	Enable
			Paper Color	White
	tiff	General	Channel Name	tiff
			Emulation	TIFF
			Protocol	3110
			Spooling *3	None
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable

*1 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*2 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*3 : It is not displayed when the NIC is installed.

Continuation of Table 2

Items				Factory Default
Virtual Printer	tiff	PCL *1	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *2	PostScript I/O Mode	Normal
			^C Response	Enable
			Paper Color	White
	pclxl	General	Channel Name	pclxl
			Emulation	PCLXL
			Protocol	3112
			Spooling *3	None
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable
		Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *1	Page Orientation	Portrait
			Page Length (5 – 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 – 999.75)	12
			Font-Pitch (0.44 – 99.99)	10
		PostScript *2	PostScript I/O Mode	Normal
			^C Response	Enable
			Paper Color	White
	prt2file *3	General	Channel Name	prt2file
			Emulation	Auto Select
			Protocol	7101
			Spooling *3	Capture to File
			Maxmun File Size *3	20000
			LPD Banner Page	Disable
			Accounting Slip Sheet	Disable

*1 : It is displayed when the values other than "Postscript" are set in "General – Emulation" menu.

*2 : It is displayed when the values other than "PCL" are set in "General – Emulation" menu.

*3 : It is not displayed when the NIC is installed.

Continuation of Table 2

Items				Factory Default
Virtual Printer	prt2file *3	Paper Handling	Paper Source	Auto Select
			Paper Size	Letter LEF
			Paper Type	Plain
			Paper Output	Auto Select
			Copies(1-999)	1
			Collate	Enable
			Job Offset	Disable
			Duplex	Disable
			Binding	Short Edge
			Edge-to-Edge	Disable
		PCL *1	Page Orientation	Portrait
			Page Length (5 - 127)	60
			Line Termination	CR->CR ; LF->LF ; FF->FF
			Line Wrap	Off
			Font-Source	Internal
			Font-Number	23
			Font-Symbol Set	PC-8
			Font-Height (4 - 999.75)	12
			Font-Pitch (0.44 - 99.99)	10
		PostScript *2	PostScript I/O Mode	Normal
			^C Response	Enable
			Paper Color	White
Web : Manage - Configuration Menu				
General	Customer	Company Legal Name		(blank)
		Phone Number		(blank)
		Fax Number		(blank)
		Street Address		(blank)
		City, State/Region, Zip/Postal Code		(blank)
		Country		(blank)
	Printer	Name		EMP-156
		Location		(blank)
	Service Contact	Name		(blank)
		Phone Number		(blank)
		Fax Number		(blank)
		E-mail		(blank)
	Accounting Information	Accounting Period Start Day of the Manth:		1
Events	Non Paper Jam Error	Check Box		Disable
	Jam Error Warning	Check Box		Disable
		Times		3
	Toner Low	Check Box		Disable
	Staple Empty	Check Box		Disable
	Accounting	Check Box		Disable
Configuration	Misc	Country Code		1
		Energy Save Time		Enabled
		Energy Save Time (15 - 230)		15

*1 : It is displayed when the values other than "Postscript" are set in "General - Emulation" menu.

*2 : It is displayed when the values other than "PCL" are set in "General - Emulation" menu.

*3 : It is not displayed when the NIC is installed.

Continuation of Table 2

Items			Factory Default
Configuration	Calendar	Time Server (Primary)	(blank)
		Time Server (Secondary)	(blank)
		Synchronization Time	0
		Set Manually	Enable
		Use Daylight Saving	Disable
		Start with	3, 1, 2
		End with	10, 1, 2
	Tray Mapping	Default Tray Mapping	100/200
	ID 0	106/206	0
		107/207	0
	ID 1	106/206	1
		107/207	1
	ID 2	106/206	4
		107/207	4
	ID 3	106/206	4
		107/207	4
	ID 4	106/206	5
		107/207	5
	ID 5	106/206	2
		107/207	2
	ID 6	106/206	4
		107/207	4
	ID 7	106/206	0
		107/207	0
	ID 8	106/206	3
		107/207	3
	ID 9 – 69	106/206	0
		107/207	0
Communication	TCP/IP(AUX)	SMTP Server Address	0.0.0.0
		Domain Name	(blank)
		Internet Printing Protocol (IPP)	Disable
		Direct printing with TCP	Enable
		LPR/LPD	Enable
		FTP	Disable

Continuation of Table 2

Items			Factory Default
Web : Service – Configuration Menu			
Events	Preventive Maintenance Warning	Check Box	Disable
		Percent	75
	Preventive Maintenance	Check Box	Disable
	Engine Page Count Exceeds	Check Box	Disable
		KPages	200
	Printer Logs	Check Box	Disable
		KPages	200
Dealer	Name		(blank)
	Phone Number		(blank)
	Fax Number		(blank)
	Street Address		(blank)
	City, State/Region, Zip/Postal Code		(blank)
	Country		(blank)
	E-Mail		(blank)
	URL		(blank)